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To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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LIFE-SAVING MEDALS.

Hitherto the presentation of life saving medals for acts of signal heroism in saving life was deemed to be a measure to promote the efficiency of the Life Saving Service and was meant to encourage the saving of life from shipwreck in the vicinity of a life saving station In all other cases where individual bravery was exhibited it required a special act of Congress to authorize the issuance of a medal by the Treasury Department to a private citizen. The recent presentation to Mr. Daniel Lynn ,of Port Huron, is an evidence of this view which up to the present year obtained not only on the lakes but on the coast and rivers as well.

During the last regular session Congress placed a different construction upon the enactment as to the recipients of life saving medals and it is now provided that the Secretary of the Treasury may bestow such medals upon persons making signal exertions in rescuing and succoring the shipwrecked and saving persons from drowning in the waters over which the United States has jurisdiction, whether the said persons or whether or not such exertions were made in the vicinity of a life-saving station.

The Secretary of the Treasury has issued the following circular:

It will be noted that awards can be made only to the following persons:

1. Those who have endangered their own lives in saving or endeavoring to save lives from perils of the sea either by actual shipwreck or from being upon or connected with any vessel in distress, in the waters over which the United States has jurisdiction, or upon an American vessel.

2. Those who have made signal exertions in rescuing and succoring the shipwrecked, and saving persons from drowning, either by actual shipwreck or from being upon or connected with any vessel in distress, in the waters over which the United States has jurisdiction.

The gold medals are to be awarded to those only who by extreme and heroic daring, have endangered their lives in saving or endeavoring to save lives from the perils of the sea, either by actual shipwreck or from being upon or connected with any vessel in distress in the waters over which the United States has jurisdiction, or upon an American vessel; and the silver medals to those only who, in cases not sufficiently distinguished to deserve the gold medal, have endangered their lives in actual shipwreck or from being upon or connected with any vessel in distress in the waters over which the United States has jurisdiction, or upon an American vessel; and to those who have made signal exertions in rescuing and succoring the shipwrecked and in saving persons from drowning either by actual shipwreck or from being upon or connected with any vessel in distress in the waters over which the United States has jurisdiction.

Satisfactory evidence of the service performed must be filed in each case. This evidence should be in the form of affidavits made by eye-witnesses, of good repute and standing, testifying of their own knowledge. The opinion of witnesses that the person for whom an award is sought imperilled his life or made signal exertions is not sufficient, but the affidavits must set forth in detail all the facts and occurrences tending to show clearly in what manner and to what extent life was risked, or signal exertions made, so that the Department may judge for itself as to the degree of merit involved. The precise locality, whether within the waters over which the United States has jurisdiction, or upon an American vessel, the name of the vessel shipwrecked or in distress, the date, time of day, nature of the weather, condition of the sea, the names of all persons present when practicable, the pertinent circumstance should be stated.

The affidavits should be made before an officer duly authorized to administer oaths, and be accompanied by a certificate showing the affiants to be credible persons, certified either by the United States district attorney for the district in which the affiants reside, or by the collector of customs of their collection district. If the affidavits are taken before an officer without an official seal, his official character must be certified by the proper officer of a court of record under the seal thereof.

A RIGHTEOUS SEIZURE.

Collector of Customs Gott, of Amherstburg, Ont., seized the American steamer Fern, owned by Capt. Hemminger, for having taken off some material from the steamer Cottrell, which was wrecked at Bar point, and neglecting to report the same when his boat arrived at Amherstburg. The captain was fined $200 and the material seized. The fine had to be paid before the collector would release the boat.

This is a righteous seizure, as only a short time ago the Detroit Free Press stated that it was an ordinary practice to steal from a wrecked or stranded vessel or run a quantity of flotsam or jetsam owned by others than the sailors thereof into Canadian ports.' The earlier that it is understood that the smallest article of value picked up on the lakes must be reported to the Collector of Customs or other wreck receivers, the sooner our people will be living under the rules of law and order, as known and exercised in the maritime world.

TREASURY DECISIONS RELATING TO MARINE.

Local inspectors of steam vessels may furnish the public press certain information.

Treasury Department,
Steamboat-Inspection Service,
Office of the Supervising Inspector-General,
Washington, D. C., May 22, 1897.

George H. Starbuck, Esq., Supervising Inspector, Second District, New York, N. Y.

Sir: Complaint having been made by persons connected with the public press that the regulations referred to in Department circular 143, dated September 27, 1893, amending Rule XII of Department Regulations of December 30, 1893, in relation to giving out information, are unnecessarily rigorously observed by the local inspectors in the second supervising inspection district, I would advise you to instruct the officers referred to that, as there are many matters of public interest coming before them that can be and should be communicated to the public through the representatives of the press, they are hereby authorized to give such information freely, in accordance with their best judgment, as to carry out the true spirit and intention of the regulations referred to herein.

Reports of all accidents and collisions received by inspectors particularly should be freely given to agents of the press upon application.

Respectfully, yours, JAS. A. DUMONT,
Supervising Inspector-General.

Approved:
L. J. Gage, Secretary.

Conditions under which original papers may be returned to licensed officers.

Treasury Department, June 10, 1897.

Sir: In reply to your letter of the 7th instant, you are informed that the decision of the supervising inspector of steam vessels of the second district inclosed in your communication, informing you, in substance, that the rules of the Department would not permit the withdrawal of original papers from the office of the local inspectors, upon which they had based an opinion in part of an applicant's qualification for a license as an officer of steam vessels, but that they would furnish copies thereof, was in accordance with the usage of many years, and the Department sustains the supervising inspector's decision in that respect. As you suggest, however, that you would prefer the return of your original papers than to retain your license, the Supervising Inspector-General will direct the local inspectors at Boston to return to you your letters of reference and discharge papers, upon surrendering your license to them for cancellation, if it is your first license. Respectfully, yours,

O. L. SPAULDING,
Acting Secretary.

Norman H. Weldon, Esq., 110 Charles Street, Boston, Mass.

Compensation of collectors of customs on the northern, northwestern, and northeastern frontiers in lieu of fees for foreign entrances and clearances, abolished by act of March 3, 1897.

Treasury Department, June 23, 1897.

Sir: Referring to your communication of the 8th ultimo, requesting a decision from this office as to the manner in which, and the appropriation from which, the collectors on the northern, northwestern, and northeastern frontiers are to be compensated after July 1, 1897, in lieu of the fees for foreign entrances and clearances which were collected by them until abolished under the act of March 3, 1897, I inclose herewith a copy of the opinion of the Solicitor of the Treasury dated June 15, 1897, wherein he states that the compensation of the customs officers referred to for services performed under the act of March 3, 1897, may be paid out of the general appropriation for collecting the revenue, which opinion is concurred in by this office. Respectfully, yours,

O. L. SPAULDING,
Acting Secretary.

To the Auditor for the Treasury Department.

NEWS AROUND THE LAKES.

CHICAGO.

Special correspondence to the Marine Record.

At the Chicago Shipbuilding Co.'s shipyard the schooner Anna Maria was in dock and had her bottom and center-board box recalked.

At the Independent Tug Line's floating dry dock the tug Welcome is receiving a general overhauling and reironing to put her in good condition for fall work.

Capt. John Prindiville chartered the steamers Oscar T. Flint and Norwalk for wheat to Sandusky at 1⅞ cents, the steamer A. Weston and consorts Jeanette and Eleanor for corn and oats to Port Huron at 1⅛ cents.

J. J. Rardon & Co. chartered the steamer Sequin for wheat to Kingston at 2⅝ cents, the steamers Interocean Gladstone and schooner Richard Winslow for corn to Buffalo at 1⅜ cents, the steamer City of Cleveland for wheat to Buffalo at 1½ cents, the steamer Alva for corn to Midland at 1⅛ cents.

H. W. Cook & Co. chartered the steamer Simon J. Murphy for corn to Kingston at 2½ cents, free of canal tolls; the steamer New Orleans for clipped oats to Buffalo at 1⅛ cents; the steamer Saniiac for lumber, Cheboygan, Mich., to Chicago, at $1.00 free on the rail; the steamers M. F. Butters and Westover and barge Bliss for lumber, Manistee to Chicago, at $1.00.

At the shipyard here the steamer R. J. Gordon was in dock for a new wheel; the tug G. J. Dore for leak stopping, a new wheel and repairs to stern bearing; schooner Commerce, bottom recalked; the steam canal-boat Novelty is receiving new keelsons, new plank on sides and bottom, some new floor timbers and frames, part new deck and re-calking all over; the canal-boat First National had a leak stopped.

Jacob Hanson, shipcarpenter, is building a sloop yacht, 20 feet long, 9 feet beam, 2 feet hold, for Mr. Newton, of Chicago. He repaired and reshipped the rudder of the steamer Chief Justice Waite, supplied the steamer Macatawa with a new fantail, rebuilt a scow for the O. S. Richardson Fueling Co. and recalked and put part new deck on their derrick scow Springheel No. 2.

J. A. Calbick & Co. chartered the steamer George G. Hadley for oats to Buffalo at 1 3-16 cents., the steamer W. P. Ketcham for corn to Kingston at 2½ cents, the schooner Lizzie A. Law for corn to Erie at 1⅜ cents, the steamer J. H. Prentice and consorts Middlesex and Halsted for corn to Buffalo at 1½ cents; steamer George Burnham for hemlock ties, Bois Blanc Island to Chicago, at 7 cents; steamer Francis Hinton, lumber, Garth to Chicago at $1.00 free on the rail; steamer Normandie, lumber, Duluth to Chicago, at $1.50 per M. feet; steamer Linden, lumber, Washburn to Chicago, at $1.50 per M. feet.

BUFFALO.

Special Correspondence to the Marine Record.

The new Ferry street grain elevator will be ready for business this week.

The steamer S. C. Hall has gone into dry dock for overhauling and repairs.

Edward Smith, one of the crew of W. J. Connors' steam yacht Enquirer, was killed on Friday last through an accidental discharge from the small signal gun.

Coal shipments are light, although brokers and owners are doing their level best to hunt up loads. The new steel steamer Starrucca got away this week, and in scraping up, quite a large number of cargoes has gone forward.

The Union Dry Dock Co. will build another new steamer for the Union Line to follow the Starrucca, the latter vessel being so far along at the time of launching that she was able to get away this week on her maiden trip to Chicago. It is reported that the wooden steamers Rochester and New York are in the market for sale, though it has not yet been officially announced.

DETROIT.

Special Correspondence to the Marine Record.

The Canadian steamer Cambria will not go into service again this season. The repairs on the boat are found to be expensive, requiring an outlay of some $6,000 or more. As a result the owners are dismantling her and will arrange for repairs during the fall and winter. She has been taken from the dock where she has been lying, near Port Huron, across to Sarnia, and will be tied up there until her insurance is adjusted.

The fuel situation grows daily more close. Some of the steamboats that had seemingly iron-clad contracts for their season's fuel supply in Ohio are looking for coal. The other parties simply cannot live up to their contracts. The steamer Frank E. Kirby was obliged to go seeking for additional fuel for that reason and had to pay a 75-cent advance on their former rate to get an inferior grade. The advance of $1 per ton in cost of coal to the D. & C. Line was noted some time since. The steamboat men notice a distinct falling off in quality as well as an advance in price.

The Detroit River ferry steamer Promise has recently been given alterations that have fitted her for open lake navigation to a distance of fifteen miles from shore. They are the outcome of a recent encounter with Hull Inspector De Wolf of Cleveland, who stopped her from running out of Cleveland with excursions on the ground that she did not have cross-bulkheads, as demanded by the steamboat inspection law. Her fine, it will be remembered, was reduced from $700 to $50 on a showing that the neglect of the law was due to ignorance. Besides these, she has been equipped with anchors and chain for her future protection if caught in a storm off shore.

The Parker & Millen fleet will all be busy at work again within a few days. On account of low freights and scarcity of cargoes the fleet has not been kept working very lively this season, but from now on it is safe to say that quick dispatch will be the order of the day, as but few firms of shipowners can get their tonnage around any livelier than Parker & Millen's when there is anything worth moving for. The freight market is now on the rise, and it is hoped that everything will be chartered from this on to the close of navigation. With the settlement of the coal miners' trouble millions of tons of coal will be sent forward, and this alone will give charters to a large fleet.

In the suit for $4,000, brought by Charles A. Chamberlin of this city, late owner of the schooner Col. Ellsworth, against Mrs. Jennie Mullin of Chicago, owner of the schooner Emily B. Maxwell, for the sinking of the Ellsworth by the Maxwell near Waugoshance last September, Judge Swan has decided for the plaintiff. The Ellsworth was light and the Maxwell loaded. The wind was about twenty miles an hour. The Ellsworth was by the wind, beatink down the Straits, and the Maxwell had it free. According to maritime law the schooner by the wind should be given the right of way. The weather was clear, and there was no excuse for the collision. The Ellsworth went down in quick order, the crew even losing their effects, and was never recovered. To this day she lies a menace to navigation, her spars close enough to the top to knock a hole in any vessel that runs on them.

After an illness extending over the last two years, Capt. Robert Rhynas, one of the best-known masters out of this port, died at St. Mary's Hospital Monday evening. A complication of nervous and stomach troubles was the cause of death. Capt. Rhynas had been sailing the lakes for the last fifteen years, commanding the famous old passenger steamer Nyack, the J. V. Moran of the old Crescent Line, and others. It is recorded of him that he never had an acicdent that proved costly to his owners or to the insurance companies, and in these days of daily mishaps, that is saying a good deal. He was, moreover a good man to work a boat. He kept his vessel going all the time, heeding neither storm nor fog in his effort to make good time. Capt. Rhynas has been in and out of the hospital many times in the past two years. He appeared on the Star Line dock only a few weeks ago, and then seemed in the same spirits as usual. His death will, therefore, come as a shock to his friends, whom he numbered wherever he was known. He had not been sailing the last two seasons. He left a widow living at No. 672 16th street.

A vessel captain voiced a complaint recently that he had passed steamers in the fog on his way down and had been unable to secure proper answers to his whistle signals. In answer to his complaint a Detroit inspector said that the usual signals were not intended for use in the fog. Now the Government inspectors at Cleveland say that the Detroit man is away off on the ruels, and that the vessel captain's complaint was just. Signals are not to be ignored in foggy weather, any more than in pleasant weather. One of the results of the discussion has been that the captains of the steamers of the D. & C. Line have one by one been called before General Manager Carter and have been examined on the rules of the open lake. The general manager proposes to have the rules thoroughly known on all boats of the line. The question of proper signals in a fog has been sirred up considerably by the cross opinions of the Detroit and Cleveland inspectors. The Detroit office admits that the Government rules are a little blind in their wording, but the inspectors insist that the true meaning is that the usual passing signals should be used only when vessels are mutually visible. Recent Government rules state plainly that such is the law on the seacoast. By inference the same rules should hold on the Great Lakes.

CLEVELAND.

Special Correspondence to The Marine Record.

The friends of Mr. John F. Pankhurst will be greatly pleased to learn that his health is improving and it is now hoped that he will soon be restored to his former good health.

Waterspouts have been frequent on Lake Erie this seasons; a couple came ashore at this port last week and created quite a ripple, as they meandered along inshore until they burst.

The steamer Empire City, built and just completed at the yards of the Cleveland Ship Building Co., has been given an official number of 136,623. Tonnage gross 4,118, and net 3,269 tons, hailing from Duluth.

The steamer Geo. W. Roby is docked at the Ship Owners' Dry Dock for complete repairs, after being on fire at Marquette. The damage is not so extensive at was expected. The tug Chris Grover has also been docked this week.

The passenger steamer City of Buffalo of the C. & B. Line is now burning hard coal of a very small size. Plenty of steam is made and she can get along all right with the anthracite until the miners' strike is over and soft coal is again plentiful.

Repairs on the schooner Alexander Holley, of the Bessemer fleet, have been completed at the Ship Owners' dry dock. The Holley has been here over two weeks. She had fifty-eight damaged plates and 130 damaged frames.

Capt. Alex Forbes of Port Huron, master of the Wilson Transit Line steamer Wallula, had to leave his boat Monday on account of sickness. Capt. Ed Morton will take the Wallula around this trip, or until Capt. Forbes recovers sufficiently to again take charge.

The mystery regarding the location of the foundered steamer Dean Richmond has been solved at last and an expedition is to be sent out to work on her on Friday. It appears that she is sunk off Dunkirk and the underwriters have entered into an arrangement for salvage service.

Capt. James Davis, of this port has been sailing the lakes for sixty-one years. The last few years he has devoted to piloting special tonnage and he makes a strong hold in his knowledge of the north shore of Lake Superior, having been coasting around there before the Sault Ste. Marie Canal was opened.

The local hydrographic office has written to Capt. J. W. Westcott of Detroit for information concerning a shoal that has for years existed 300 feet off the old distillery near Sandwich. Several vessels have rubbed on it, and a few have been brought to a stop, but all have managed to effect their own release. As it is of mud and sand no damage has been done by it.

The Otis Steel Co. has the distinction of casting the largest Gatling gun ever cast in this country, and the Cleveland City Forge with boring it to an eight-inch diameter of bore. It is to be hoped that this is the first of many hundreds of guns which will be cast and bored out at this port, thus giving Cleveland two imporatant national industries of exclusive distinction.

Receipts of ore at ports in Cuyahoga district were very heavy last month and show a gain over June, when 1,219,302 tons were received. The figures are as follows:

	Gross Tons.
Ashtabula	503,336
Cleveland	432,902
Fairport	254,727
Conneaut	96,613
Lorain	100,121
Total	1,387,699

Colonel Jared A. Smith, Corps of Engineers, U. S. A., in repairing and rebuilding the breakwater at this port shows that he is one of the most advanced engineers in the service, no bird cage timber structures falling into decay before the work is totally completed suits him. Instead, sightly, permanent and substantial blocks of concrete for superstructure work is more according to his ideas of national undertakings.

FLOTSAM, JETSAM AND LAGAN.

Wheeler & Co., at West Bay City, have laid the keel for the second ocean tug.

The barge C. G. King has been released from the beach in South Manitou Harbor.

Crane & Baird, grain shippers at Ft. William, have sent 41,000 bushels of Manitoba wheat to Great Britain, via Erie Canal.

Capt. James Florry is having a new tug built at Toledo. The boilers and machinery of the old tug Delia are being used in the new boat.

The Thompson Tug Line of Port Huron and the Sullivan Tug Line of Toledo are at war. Each threatens to invade the other's home waters.

The Roberts Boiler in the cruising steam yacht "Theresa," owned by Mr. Gustavus Sidenberg of New York City, is said to have steamed over 70,000 miles without repairs.

One of the best known captains on the lakes, Capt. Daniel Nelson, died at Milwaukee on Tuesday morning after a long illness. He was afflicted with heart trouble. He sailed the schooners Schuette and Granger and the steamer Pahlow, Sachem and Ionia. He was forty-seven years old.

The Connersville Steel Elevator Co. has taken a contract for building the new Canadian Pacific elevator at Ft. William. The elevator is to hold 1,500,000 bushels, with a capacity for doubling, and is to be completed by February.

There is no less than thirty women light-house keepers in the employ of the United State at present, and some of them have been in the service for forty years. Harriet E. Colfax, keeper of the light at Michigan City, Lake Michigan, was appointed in 1861.

The steamer Belgica, with the Gerlache Antarctic expedition on board, sailed from Antwerp on Monday. It is expected that the expedition will arrive at Graham's Land early in December. The crew of the Belgica numbers 21 men. She has on board provisions for two years.

A revenue cutter has been at East Tawas investigating the obstructions of piles driven in the bay. They were placed to hold rafts, and complaints were made that the rafts were a menace to navigation. The law requires four lights on each raft, and this has not been complied with.

The Davidson shipyard at Bay City resumes operations again after a ten-days' shut-down while waiting for the machinery for the big wooden steamer building at the yards. The machinery arrived Monday from the Fron-

tier Iron Works of Detroit. A full crew of men will be employed, and the steamer will probably be launched the first of next month. The steamer Shenandoah is being thoroughly overhauled.

The capacity of the Chicago River for the accommodation of large vessels seems to be steadily increasing without anything being done to widen and straighten the channel. This week the steamer Yale went clear to the Minnesota elevator in the north branch and loaded a cargo and got down again without trouble. Until the trial was made most vesselmen believed that no steamer the size of the Yale could get anywhere near the elevator.

Work is progressing so rapidly on the new Anchor Line elevator at Erie, for which Dunbar & Co. of Buffalo have the contract, that it is expected it will be ready to receive grain in ten days. The new elevator will hold almost as much grain as the combined capacity of the other elevators. The work has been greatly retarded by the weather, but the fact that business has been slow has not overcrowded the other elevators and they have been able to keep even.

The whaleback steamer Christopher Columbus will be plying between Chicago and Milwaukee during the summer of 1898, so far as those interested in her know. Capt. Keith, who is the superintendent of her interests in Chicago, was shown the story in a morning paper which related that the boat would be cut in two, taken to New York, and would next summer go into the Alaska trade, running between Seattle and the Yukon. The captain said so far as he knew there was absolutely no foundation for the report.

A report from Toledo states that there is but little coal leaving that port, and until the strike is ended the coal trade here and elsewhere by lake will be very dull. There is practically no coal for lake shipment, and but little for fuel purposes. Comparing prices now with those that ruled at the time the strike occurred, they are about $1 higher per ton and it is expected to be put up to $3 per ton, or 25 cents higher, for bituminous. It is anticipated that when the strike is over there will be a lively business by lake in coal.

NOTICE TO MARINERS.

United States of America—Northern Lakes and Rivers—New York.

Treasury Department,
Office of the Light-House Board,
Washington, D. C., August 12, 1897.

SUNKEN ROCK GAS BUOY.—On August 3, 1897, a black gas buoy, showing a fixed white light, was established on the southeasterly side of the main channel of the St. Lawrence River, in 12 feet of water, on the westerly edge of a reef, just under water, and about 5-16 miles SW. ⅛ S. from Sunken Rock Light House, in place of Sunken Rock Buoy, No. 17, a black spar.

FEATHER-BED SHOAL GAS BUOY.—On August 3, 1897, a black gas buoy, showing a fixed white light, was established on the easterly side of the channel of the St. Lawrence River, in 17 feet of water, on the westerly edge of a rocky shoal between Carleton Island and Cape Vincent, and about 1 mile SSW. ½ W. from the southwesterly point of Carleton Island, in place of Feather-Bed Shoal Buoy, No. 25, a black spar.

By order of the Light-House Board.

PORTAGE LAKE AND RIVER LIGHTS.

Notice is hereby given that, on or about August 18, 1897, the following-described lights will be established in the structures recently erected in Portage Lake and River. The lights are described in the order in which they will be passed when entering the river from Keweenaw Bay.

Light No. 0.—A fixed white lantern light, on a small white house, on a crib, on the easterly side of the channel, nearly opposite Edgertons Dock. This light, in range with Portage Range Front Light, marks the point on the range line of Range Lights Nos. 1 and 2, from which the latter line should be followed.

Range Lights Nos. 1 and 2.—Front Light, No. 1, a fixed white lantern light, 11 feet above the water, on a target house, on the easterly bank of the river, about halfway between Edgertons and Messner.

Rear Light, No. 2, a fixed white lantern light, 32 feet above the water, on a white post with target, 518 feet S. 39° 30′ E. (SE. ½ S.) in rear of the front light. In going up the river these lights will be in range astern. The range line should be followed for about 3,100 feet (3-5 mile) to its intersection with the line marked by Range Lights Nos. 3 and 4.

Range Lights Nos. 3 and 4.—Front Light, No. 3, a fixed red lantern light, 12 feet above the water, on a white target house, on a pile cluster, on the westerly side of the channel near Cut No. 2.

Rear Light, No. 4, a fixed white lantern light, 28 feet above the water, on a white post with target, in the marsh on the northerly side of Cut No. 3, 1,030 feet (1-5 mile) N. 27 50′ W. (NNW. ½ W.) in rear of the front light. In going up the river these lights will be in range ahead. The range line should be followed about 4,300 feet 13-16 mile. Pass Light No. 3 on the port hand, then take up the range line marked by Lights Nos. 5 and 6, on which Light No. 4 will be passed on the starboard hand.

Range Lights Nos. 5 and 6.—Front Light, No. 5, a fixed white lantern light, 12 feet above the water, on a white target house, on a pile cluster, on the easterly side of the channel near Cut No. 2 and opposite Light No. 3.

Rear Light, No. 6, a fixed white lantern light, 28 feet above the water, on a white post with target, in the marsh on the easterly side of the river, 730 feet S. 57° 35′ E. (SE. by E. ⅛ E.) in rear of the front light. In going up the river these lights will be in range astern. The range line should be followed (NW. by W. ⅛ W.) about 2,200 feet (5-12 mile) through Cut No. 3 to the intersection of the line with the line marked by Range Lights Nos. 7 and 8.

Range Lights Nos. 7 and 8.—Front Light, No. 7, a fixed white lantern light, 11 feet above the water, on a white target house, on the bank on the edge of the marsh at Princess Point.

Rear Light, No. 8, a fixed white lantern light, 35 feet above the water, on a white post with double target, in the water at Princess Point, 1,410 feet N. 70° 20′ W. (WNW. ¼ W.) in rear of the front light. In going up the river these lights will be in range ahead. The range line should be followed about 2,000 feet (⅜ mile) through Cut No. 4 to the intersection of the line with the line marked by Range Lights Nos. 9 and 10.

Range Lights Nos. 9 and 10.—Front Light, No. 9, a fixed red lantern light, 12 feet above the water, on a white target house, on a pile cluster, near the Bayou.

Rear Light, No. 10, a fixed red lantern light, 28 feet above the water, on a white post with double target, in the marsh at the Bayou, 575 feet S. 85° 40′ W. (W. ⅛ S.) in rear of the front light. In going up the river these lights will be in range ahead. The range line should be followed about 1,350 feet (¼ mile) to a point about 350 feet from the front light. The front light should be passed on the port hand.

Light No. 11.—A fixed white lantern light, 12 feet above the water, on a small white house, on a pile cluster just back of the lower snubbing post, and nearly opposite Light No. 9. The light marks a turn at Princess Point and should be passed on the starboard hand.

Light No. 12.—A fixed white lantern light with a red panel, 12 feet above the water, on a white target house just back of the upper snubbing post at Princess Point. The light marks a turn at Princess Point, and should be left on the starboard hand. The red panel of this light. in range with Light No. 10, guides N. 14° 20′ E. (N. by E. ¼ E.) to the intersection of this line with the range line marked by lights Nos. 13 and 8, from which point the latter range should be followed.

Range Lights Nos. 13 and 8.—Front Light, No. 13, a fixed white lantern light, 12 feet above the water, on a white target house on the easterly bank of the river, 370 feet N. 5° W. (N. ½ W.) in front of the rear light (No. 8) already described. In going up the river these lights will be in range astern. The range line should be followed, from the intersection marked by lights Nos. 12 and 10, about 1,780 feet to the intersection of this line with the range line marked by the Portage River Range Lights.

(L. H. B. Notice to Mariners No. 109 of 1896 and Bulletin No. 63, par 20.)

Portage River Range Lights.—These lights will hereafter be designated "Range Lights Nos. 14 and 15."

Pilgrim Point Light.—A fixed red lens lantern light, 16 feet above the water, illuminating 270° of the horizon, on a small white house on a triangular pile foundation, in 8 feet of water, on the end of the shoal at Pilgrim Point. This light should be left on the port hand.

Osceola Point Light.—A fixed white lantern light, 8 feet above the water, in a small white house, on the end of the low projecting point on the northerly side of the river, about 1 mile above the Houghton and Hancock Bridge.

Atlantic Point Light.—A fixed red lantern light, 8 feet above the water, in a small white house, on the southerly side of the river near Atlantic Mine Dock, about 1¾ miles above the Houghton and Hancock Bridge.

Rouleau Point Range Lights.—Front Light, a fixed white lantern light, 11 feet above the water, on a white target house on a small crib.

Rear Light, a fixed white lantern light, 23 feet above the water, on a white post with target, on the corner of a red boathouse on shore, 450 feet in rear of the front light. The range line should be followed, N. 31° E. (NNE. ¾ E.) about 1¾ miles to its intersection with the range line marked by the Portage Lake Ship Canals Range Lights

Bearings are true, miles are statute miles.

By order of the Light-House Board.

W. S. SCHLEY,
Captain, U. S. Navy, Chairman.

RIVER AND HARBOR WORK.

Notwithstanding the completion of the twenty-foot channel there is work enough ahead to last the lake dredgers for several years to come. This is the testimony of W. S. Carkin, of the firm of Carkin, Stickney & Cram, and one of the most prominent men in the contracting business. "The new work in the St. Mary's River recommended by Col. Lydecker, bids for which will be opened the latter part of this month, will involve an expenditure of $500,000," said Mr .Carkin. "Then within the last thirty days the Canadian Government has decided on $6,000,000 to $8,000,000 worth of work to be done around the Lachine Rapids. Besides all this, work on the remodeling and deepening of Chicago, Cleveland and other harbors to correspond with the deep channel is in progress or to begin.

BUFFALO COAL TRADE.

The following statistics of the coal trade of Buffalo, N. Y., were compiled by Mr. William Thurstone, secretary of the Merchants' Exchange:

Receipts of coal for July by railroad, not reported by request; receipts by lake for the month of July, none, nor for several years past. Shipments by lake for the month of July, 239,345 net tons, as compared with 249,615 net tons in 1896, and 299,660 net tons in 1895; for the season to August 1st, 669,588 net tons, as compared with 893,798 net tons in 1896 and 829,829 net tons in 1895. Receipts by canal for the month of July, none, as compared with 1,887 net tons in 1896 and 1,633 net tons in 1895; for the season to August 1st, none, as compared with 8,897 net tons in 1896 and 1,973 net tons in 1895. Tug shipments by canal for July, none, as compared with 491 net tons in 1896 and 1,144 net tons in 1895; for the season to August 1st, none, as compared with 731 net tons in 1896 and 3,392 net tons in 1895. The shipments by lake thus far this season show a decrease under 1896 of 224,210 net tons and a decrease under 1895 of 160,271 net tons.

Lake freights on coal from Buffalo for July this year were 20c to Chicago, Milwaukee, Duluth, Gladstone, Lake Superior ports, Toledo, Washburn; 25c to Racine, Green Bay, Bay City and Sheboygan, and 35c to Saginaw. A year since the rates were as follows: 50@25c to Chicago; 45@25c to Milwaukee; 25c to Duluth and Lake Superior ports; 35@30c to Saginaw; 40@25c to Green Bay; 35c to Sheboygan; 25c to Toledo and Bay City, and 40c to Racine.

The distribution of coal thus far this season by lake was to the following places. 278,051 tons to Chicago, 128,750 tons to Milwaukee, 98,600 tons to Duluth, 11,750 tons to Racine, 7,550 tons to Green Bay, 90,439 tons to West Superior 6,710 tons to Saginaw, 21,680 tons to Toledo, 900 tons to Lake Linden, 3,600 tons to Marquette, 3,128 tons to Fort William, 1,400 tons to Sault Ste. Marie, 1,100 tons to Manitowoc, 6,275 tons to Kenosha, 2,100 tons to Bay City, 1,675 tons to Port Huron, 2,750 tons to Gladstone, 800 tons to Washburn, 600 tons to Portage, 5,250 tons to Hancock, 195 tons to Alpena, 500 tons to Byng Inlet ,800 tons to Michigan City, 1,100 tons to Amherstburg, 330 tons to Sand Beach, 25 tons to Oscoda and 9,400 tons to miscellaneous points by vessels clearing from Tonawanda.

PITTSBURG AND LAKE ERIE CANAL.

Now it is rumored that English capitalists are willing to build the Pittsburg & Lake Erie Canal. John E. Shaw, secretary of the canal commission, admitted the rumor was true and said the commission had authorized the printing of 5,000 reports of 300 pages each, with 100 illustrations. One-half of the number to be sent to London for distribution among intending investors. An English syndicate has had representatives looking over the field and these have gone carefully over the project. The Pittsburg & Lake Erie Canal is intended to connect the Ohio River at Rochester with Lake Erie at Ashtabula. It has been figured that the amount of ore and coal traffic will alone pay the dividends on the investment.

THE LATE CAPT. CALVIN HERRICK.

Capt. Calvin Herrick died at his home, 3368 Cherry street, Toledo, on Saturday.

The late Calvin Herrick, one of the oldest living lake captains in this section, was a son of James S. and Martha (Sharpsteen) Herrick, and was born in Richmond, Ontario county, New York, January 19, 1819. In 1823 his parents came to Ohio and settled at Maumee. His father carried on his trade (blacksmithing). Shortly after they moved to Waterville, but while the subject of this sketch was quite a lad his parents returned to New York and settled in Livingstone county. Here young Herrick remained until he was 16 years of age, when he came to Pittsburg. In 1837 he commenced his career in lake navigation by entering the employ of Capt. Curtis Perry, on the schooner Caroline, with whom he sailed until 1845—the last two years as mate. In 1845 he was promoted to master of the schooner Kentucky, owned by D. B. Smith, of Maumee (now secretary of the Toledo Produce Exchange), a position he held for a year and a half. For two years following he was mate of the propeller Globe, commanded by Capt. Henry Whitmore. He was the captain of the schooner Alvin Bronson two years. In 1852 he became captain of the Henry A. Kent, until she was destroyed by fire May 18, 1854. Following this date he commanded the Scioto for two years. He brought out the propeller Potomac and commanded her for a length of time. In 1856 the marine insurance companies along the lakes formed a board of lake underwriters for mutual protection, and employed men in the different divisions of their territory to inspect vessels and report their condition. Mr. Herrick was employed by this board as marine inspector, his district extending from Toledo to Cleveland. This position he held for several years, and subsequently acted in a similar capacity for the Fire and Marine and Toledo Insurance Companies. For many years appointed harbormaster by the city council of Toledo, a position he filled most acceptably.

Captain Herrick retired from business about 25 years ago. He lived an honorable, conscientious life, and in all his relations with his fellow-men proved worthy of trust and confidence.

SAILING AND STEERING RULES.

THE WHITE BILL, PASSING SIGNALS IN FOG.

Some time ago an interview with a local inspector of steamboats was printed criticising Capt. Morris of the Bradley Line steamer M. B. Grover, for complaining that masters of two steamers had neglected to answer his passing signals in a fog in which neither could see the other. The inspector held that the rules did not demand the blowing of passing signals in a fog; that Morris was wrong; the others right.

A letter to Supervising Inspector General Dumont, head of the steamboat inspection service, setting forth all the facts, has brought out the following reply. He says Capt. Morris is right, but at the same time criticises the lake rules of the road as faulty in this respect, and against his own judgment. It will be noticed, too, that the international marine conference, by a subsequent action, held his view that passing signals should not be blown unless the vessels cornered were in sight of each other. This is the letter:

"I am in receipt of your letter of the 11th inst., referring to a complaint of Capt. W. E. Morris of the Bradley steamer M. B. Grover, that two unnamed steamers had neglected to answer his passing signals in a fog, etc., with a criticism of Capt. Morris' statement by one of the local inspectors at Detroit; the inspector asserting that in the matter referred to Capt. Morris was wrong and the captains of the unnamed steamers right in the failure to answer the Grover's passing signals.

To your request for an interpretation of the rules named in the case described, I would say that Capt. Morris was right in assuming that the rules required an answer to his passing signals; which answers, however, were not required, under the rules, to correspond with the signal given himself, as it was optional with the other steamers to so answer, or answer with the alarm signal, one or the other of which was compulsory.

The right to give passing signals in fog is authorized by section 23 of the lake laws and rules, such section being qualified, however, as stated in that section, by section 26, as you will see by reference to the two sections, which are quoted as follows:

"23. In all weathers every steam vessel under way in taking any course authorized or required by these rules, shall indicate that course by the following signals on her whistle, to be accompanied whenever required by corresponding alteration of her helm; and every steam vessel receiving a signal from another shall promptly respond with the same signal, or, as provided in rule 26: One blast to mean, 'I am directing my course to starboard.' Two blasts to mean, 'I am directing my course to port.' But the giving or answering signals by a vessel required to keep her course shall not vary the duties and obligations of the respective vessels.

"26. If the pilot of a steam vessel to which a passing signal is sounded deems it unsafe to accept and assent to said signal, he shall not sound a cross-signal; but in that case, and in every case where the pilot course or intention of an approaching steamer, whether from signals being given or answered erroneously, or from other causes, the pilot of such steamer so receiving the first passing signal, or the pilot so in doubt, shall sound several short and rapid blasts of the whistle; and if the vessels shall have approached within half a mile of each other both shall reduce their speed to bare steerageway, and, if necessary, stop and reverse."

In connection therewith would say that I am decidedly averse to using passing signals by steam vessels, when such vessels are not clearly in sight of each other; but such opinion does not change the lake law on the subject, which clearly authorizes their use with the qualifications above referred to. My opinion on the subject as above indicated was fully expressed to the gentlemen composing the committee of lake masters who had the law enacted; and, in their presence, to the senate committee on commerce while considering the bill, modifying, however, such opinion before the committee by the statement that the requirements of section 15 in a measure reduced the dangers liable to arise from the use of the passing signals in thick weather. When vessels were not clearly in sight of each other, the section referred to reading as follows:

"15. Every vessel shall, in thick weather, by reason of fog, mist, falling snow, heavy rainstorm, or other causes, go at moderate speed. A steam vessel hearing, apparently not more than four points from right ahead, the fog signal of another vessel, shall at once reduce her speed to bare steerageway, and navigate with caution until the vessels shall have passed each other."

In discussing the question of fog signals, in a letter addressed to the president of the board of United States delegates, international marine conference, dated Sept. 6. 1889, referring to the then existing fog signals of the board of supervising inspectors, I said that, "None of the signal rules referred to, however, indicate in any manner the courses the vessels are steering. Were they to do so, it would, I believe, create confusion and consequent danger; particularly would this be the case when more than two vessels are in proximity. In such cases, running slow with frequent stoppages, until the signals (as at present used) are heard well abaft the beam, will make collisions in fogs nearly impossible in the case of steam vessels at least."

The international marine conference, by their subsequent action, were, I believe, unanimously of the same opinion as this office; for, when they provided the rule for passing signals, they did so with the parliamentary qualification that those signals were to be used only "when vessels are in sight of each other."

In the act of Congress, approved June 7, to take effect Oct. 7, 1897, on the inland waters of the Atlantic and Pacific coasts, the danger of using signals when vessels were not in sight of each other was, at my suggestion, emphasized in the provisions of rule IX, as follows:

"Rule IX. The whistle signals provided in the rules under this article, for steam vessels meeting, passing, or overtaking, are never to be used except when steamers are in sight of each other and the course and position of each can be determined in the daytime by a sight of the vessel itself, or by night, by seeing its signal lights. In fog, falling snow or heavy rainstorms, when vessels cannot see each other, fog signals only must be given.

A HOMING PIGEON ASTRAY.

When the steamer Monteagle was about four miles off Big Point Au Sable a few days ago a carrier pigeon marked or tagged No. 6008K alighted on her deck and was captured by Chief Officer M. T. Lynch. The master allowed the bird to take flight again after resting, but on the following day the same bird boarded the Monteagle again off Waugoshance and was caught this time by the master, William Griffin. Our correspondent fails to say whether the bird was sent on the wing again or not.

TABLE OF ATLANTIC DISTANCES.

In their last annual report the St. John, N. B. Board of Trade published the following important table of distances across the Atlantic Ocean, from certain ports in the United Kingdom to the principal ports in Canada and certain ports in the United States. It was prepared by Capt. W. H. Smith, R. N., Chairman of the Board of Examiners for Masters and Mates in Canada:

	Miles.
Liverpool to Quebec via North of Ireland and Belle Isle ..... E.	2,633
Liverpool to Quebec via North of Ireland and Cape Race	2,801
Liverpool to Quebec via South of Ireland and Cape Race	2,825
Liverpool to Halifax via North of Ireland and Cape Race	2,450
Liverpool to Halifax via South of Ireland and Cape Race	2,473
Liverpool to Halifax via South of Ireland and south of Newfoundland Bank	2,619
Liverpool to St. John, New Brunswick, via North of Ireland and Cape Race	2,700
Liverpool to St. John via South of Ireland and Cape Race	2,700
Liverpool to St. John via South of Ireland and south of Newfoundland Bank	2,843
Glasgow to Quebec via North of Ireland and Belle Isle	2,563
Loch Ryan to Quebec via North of Ireland and Belle Isle	2,513
Belfast to Quebec via North of Ireland and Belle Isle	2,524
Dublin to Quebec	2,707
Milford Haven to Quebec	2,687
Liverpool to Sydney, Cape Breton	2,281
Glasgow to Sydney, Cape Breton	2,211
Loch Ryan to Sydney, Cape Breton	2,161
Milford Haven to Sydney, Cape Breton.....	2,183
Glasgow to Halifax	2,380
Loch Ryan to Halifax	2,330
Belfast to Halifax	2,344
Dublin to Halifax	2,409
Milford Haven to Halifax.....	2,353
Glasgow to St. John	2,630
Belfast to St. John.....	2,594
Dublin to St. John	2,659
Antwerp to Halifax	2,767
London to Halifax	2,723
Antwerp to St. John	3,017
Liverpool to Portland, Maine, via North of Ireland and Cape Race	2,765
Liverpool to Portland, Maine, via South of Ireland and Cape Race	2,789
London to Portland, Maine, via South of Ireland and Cape Race	3,033
Liverpool to Boston, Mass., via North of Ireland and Cape Race	2,807
Liverpool to Boston, Mass., via South of Ireland and Cape Race	2,830
Liverpool to New York, shortest distance, via Cape Race	3,034
Liverpool to New York, not calling at Queenstown	3,108
Liverpool to New York, average distance, mail steamers' route	3,10[illegible]

TO REACH THE KLONDIKE.

Messrs. Goodall, Perkins & Co., San Francisco, general agents for the Pacific Coast Steamship Co., are receiving such a multitude of inquiries on how to reach the Klondike that in order to save time they have printed the following particulars, which they have kindly forwarded to the Record with map and regular folder, giving rates of passage, etc.

There are two different routes to these gold fields. From San Francisco or Seattle to St. Michaels, thence by river steamers up the Yukon to the Klondike (Dawson City.) Distance about 4,700 miles. Usual fare, $150. The voyage to St. Michaels is in the open ocean and rough waters. The other route (and the one taken by probably nine-tenths of all those going to the Yukon) is by this company's steamers (Pacific Coast Steamship Co.) sailing from San Francisco every fiifth day and transferring to the Alaska steamers at Puget Sound ports. All of these steamers stop at Juneau; some of them go up as far as Dyea, which is the head of ocean navigation. The passage from Puget Sound North is exceedingly smooth as it is all inland navigation. From Dyea, the route is over Chilcoot pass, a distance of 25 miles to Lake Lindermann, the same being the head waters of the Yukon water shed. From Lake Lindermann by a system of connecting rivers and lakes, down stream to the Klondike gold fields, a distant between 500 and 600 miles. Total distance by this route from San Francisco about 2,300 miles, from Seatle about 1,600 miles. There is no wharf at Dyea. The tide rises and falls about 23 feet, the beach is long and flat so that at high tide it is covered for a distance of probably a mile inland from where the steamer anchors. Hence the landing of passengers and freight is slow and tedious, as it has to be done in the ships boats. The Steamship Company's responsibility ends at anchorage, but it nevertheless uses its boats and crew helping passengers and their outfits and freight ashore. Horses and cattle have to swim ashore.

The present rush to the mines is so great that some difficulty may be experienced in getting packers to take goods over the pass. However, parties are taking up lots of horses, mules and burros, and it is more than likely where there is such a demand that it will be promptly met. When the writer was at the summit in the spring, Archie Burns was rigging a wire cable to convey goods over the very steep grade of the summit about 1,100 feet. The charge at that time for packing from Dyea over the Summit to Lake Lindermann was 5 to 6 cents per pound, but at that time it was easy sledding over the snow. Now that the snow has disappeared, goods must be packed either on animals or men's backs. Hence the charge will doubtless be higher as the work is slower and more difficult.

The time occupied in making the run is ordinarily,—from San Francisco to Juneau, 8 to 9 days; from Puget Sound or Portland, 5 to 6 days. There is no trouble in purchasing supplies at the lowest figure and under most favorable conditions, in Juneau, in case parties conclude after reaching there to take a supply across the Divide. The best time to take stores into the Yukon via Juneau and Dyea is in the spring, about March or April. There is no trouble, however, in parties making the trip in the summer time, but we advise against undertaking it from October to February.

The recent news in the daily press regarding the wonderful richness of the diggings at the Klondike are substantially correct. Doubtless there has been more or less exaggeration, but it is safe to say that the mines are amongst the richest ever discovered. Ordinary wages paid to miners range from $10 to $15 per day according to latest accounts. We are of the opinion that there will be sufficient food supplies to last over the winter, and hence there will be no serious danger from suffering on that account. Of course, this will not be the case if people rush in there in unlimited numbers.

The first twin-screw steamship of the Holland-American line, the Rotterdam, arrived at Rotterdam July 31, from the yards of her builders, Harland & Wolff, of Belfast. She measures 8,000 tons and has engines of 5,000 horse power. She made sixteen and a half knots on her trial trip. She will sail from Rotterdam for New York, on Aug. 18.

COMPLETE LIST OF VESSELS IN THE UNITED STATES NAVY.

The accompanying table gives the length on load water line, extreme breadth, mean draft, displacement, speed in knots per hour and the maximum indicated horse power of all vessels built and building for the United States Navy. The added particulars relating to torpedo boats Nos. 19, 20, 21, building, respectively, by Harlan & Hollingsworth, Wolff & Zwicker and Gas Engine & Power Co., Charles L. Seabury & Co., to cost $236,000, $214,500 and $210,000 each, brings the table and information up to date.

There are five of the battleships which will not be ready to go into commission for some time yet, as for instance, the Kearsarge and Kentucky, Jan. 2, 1899; Wisconsin, Sept. 25, 1899; Alabama, Oct. 2, 1899; Illinois, Oct. 5, 1899.

The contracts for these last five ships having been signed for last year, the remaining six battleships have all been completed since 1893, so that they may be considered modern in every sense of the word.

The thirteen armored vessels, single turret monitors (iron), were all authorized to be built in 1862 at a mean cost of about half a million dollars each, and they have a speed of five to six knots per hour. The unarmored steel vessels, cruisers, protected cruisers and gunboats have all been built and placed in commission within the past decade, so also with the composite-built gunboats, the six of which were only completed this year and seventeen torpedo boats, including the Holland submarine torpedo boat, are all in course of construction or completion and all are built of steel except the Stilleto, which is a wooden craft. They will, however, be nearly all ready for service this year.

In the table of iron and wooden steam vessels there are some obsolete and ancient craft, but as they are still on the naval list it is of course necessary to include them. The Michigan, for instance, was built at Erie, Pa., for special service on the lakes in 1844, or over half a century ago. The Lancaster and Hartford, wooden vessels, were built in 1858. The latter is now being rebuilt at the Mare Island navy yard, California, and is to be refitted with new machinery and modern battery. The wooden steam and sailing vessels, of which the old ship Constitution, built at Boston in 1797, leads the fleet, are now unfit for sea service. The New Hampshire and Vermont, built ten years later, and others at intervals thereafter, are all doing stationary duty, such as receiving, training and hospital service, etc.

From the foregoing condensed report it may be seen that with the completion of the several battleships, the torpedo boats and the elimination of the old-time wooden sail and steam craft, the United States Navy is in all respects a modern and powerful one, each ship being the peer of her class built by other maritime powers.

BATTLESHIPS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Indiana	348.0	69.3	24.0	10,288	15.547	9,738
Iowa	360.0	72.2½	24.0	11,410	16.	11,000
Maine	318.0	57.0	21.6	6,682	17.45	9,293
Massachusetts	348.0	69.3	24.0	10,288	16.21	10,403
Oregon	348.0	69.3	24.0	10,288	16.79	11,111
Texas	301.4	64.1	22.6	6,315	17.	8,000
Kearsarge	368.0	72.5	23.6	11,525	16.	10,000
Kentucky	368.0	72.5	23.6	11,525	16.	10,000
Illinois	368.0	72.5	23.6	11,525	16.	10,000
Alabama	368.0	72.5	23.6	11,525	16.	10,000
Wisconsin	368.0	72.5	23.6	11,525	16.	10,000

ARMORED CRUISERS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Brooklyn	400.6	64. 8¼	24. 0	9,271	21.91	18,769
New York	380.6½	64.10	23.10	8,200	21.	17,401

ARMORED RAM.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Katahdin	250.9	43.5	15.0	2,155	16.11	5,068

DOUBLE TURRET MONITORS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Amphitrite	259.6	55.10	14. 6	3,990	10.5	1,600
Miantonomoh	259.6	55.10	14. 6	3,990	10.5	1,426
Monadnock	259.6	55.10	14. 6	3,990	12.0	3,000
Monterey	256.0	59. 0	14.10	4,084	13.6	5,244
Puritan	289.6	60. 1½	18. 0	6,060	12.4	3,700
Terror	259.6	55.10	14. 6	3,990	10.5	1,600

SINGLE TURRET MONITORS (IRON).

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Ajax	225.0	43.8	13.6	2,100	5 to 6	340
Comanche	200.0	46.0	11.6	1,875		340
Canonicus	225.0	43.8	13.6	2,100		340
Catskill	200.0	46.0	11.6	1,875		340
Jason	200.0	46.0	11.6	1,875		340
Lehigh	200.0	46.0	11.6	1,875		340
Mahopac	225.0	43.8	13.6	2,100		340
Manhattan	225.0	43.8	13.6	2,100		340
Montauk	200.0	46.0	11.6	1,875		340
Nahant	200.0	46.0	11.6	1,875		340
Nantucket	200.0	46.0	11.6	1,875		340
Passaic	200.0	46.0	11.6	1,875		340
Wyandotte	225.0	43.8	13.6	2,100		340

UNARMORED STEEL VESSELS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Atlanta	271.3	42.1¾	16.10	3,000	15.60	4,030
Baltimore	327.6	48.7½	19. 6	4,413	20.096	10,064
Boston	271.3	42.1¾	16.10	3,000	15.60	4,030
Charleston	312.7	46.2	18. 7	3,730	18.20	6,666
Chicago	325.0	48.2	19. 0	4,500	15.10	5,084
Cincinnati	300.0	42.0	18. 0	3,213	19.	10,000
Columbia	412.0	58.2¼	22. 6½	7,375	22.8	18,509
Detroit	257.0	37.0	14. 7	2,089	18.71	5,227
Marblehead	257.0	37.0	14. 7	2,089	18.44	5,451
Montgomery	257.0	37.0	14. 7	2,089	19.05	5,580
Minneapolis	412.0	58.2¼	22. 6½	7,375	23.073	20,862
Newark	310.0	49.2	18. 9	4,098	19.	8,869
Olympia	340.0	53.0⅝	21. 6	5,870	21.686	17,313
Philadelphia	327.6	48.7½	19. 2½	4,324	19.678	8,815
Raleigh	300.0	42.0	18. 0	3,213	19.	10,000
San Francisco	310.0	49.2	18. 9	4,098	19.525	9,913
GUNBOATS—						
Bennington	230.0	36.0	14. 0	1,710	17.5	3,436
Castine	204.0	32.1½	12. 0	1,177	16.032	2,199
Concord	230.0	36.0	14. 0	1,710	16.8	3,405
Helena	250.9	40.1⅜	9. 0	1,392	13.0	1,600
Machias	204.0	32.1½	12.00	1,177	15.46	2,046
Nashville	220.0	38.3	11.00	1,371	14.0	1,750
Petrel	176.3	31.0	11. 7	892	11.79	1,095
Wilmington	250.9	40.1⅜	9. 0	1,392	13.0	1,600
Yorktown	230.0	36.0	14. 0	1,710	16.14	3,392
COMPOSITE VESSELS—						
Annapolis	168.0	36.0	12. 0	1,000	12.	800
Vicksburg	168.0	36.0	12. 0	1,000	12.	800
Newport	168.0	36.0	12. 0	1,000	12.	800
Princeton	168.0	36.0	12. 0	1,000	12.	800
Wheeling	174.0	34.0	12. 0	1,000	12.	800
Marietta	174.0	34.0	12. 0	1,000	12.	800
SPECIAL CLASS—						
Bancroft	187.6	32.0	13. 4	976	14.37	1,213
Dolphin	240.0	32.0	14. 3	1,486	15.50	2,253
Vesuvius	252.4	26.6⅜	10. 7½	929	21.42	3,795
TORPEDO BOATS—						
Cushing	138.9	14.3	4.10⅜	105	22.5	1,720
Ericsson	149.7	15.6	4. 9	120	24.	1,800
Stiletto	88.6	11.0	3. 0	31	18.22	359
No. 3—building	160.0	16.0¾	5. 0	142	24.5	2,000
No. 4	160.0	16.0¾	5. 0	142	24.5	2,000
No. 5	160.0	16.0¾	5. 0	142	24.5	2,000
No. 6	175.0	17.0	5. 6		27.5	
No. 7	175.0	17.0	5. 6		27.5	
No. 8	170.0	17.0	5. 6	182	26.	3,200
Submarine	85.3	11.6		168	8.	1,200
No. 9	147.0	16.4½	4. 7½	146.4	30½	4,200
No. 10	147.0	16.4½	4. 7½	146.4	30½	4,200
No. 11	210.0	20.4½	6. 0	273	30.	5,600
No. 12	146.0	15.3½	5. 4	128	22½	1,750
No. 13	146.0	15.3½	5. 4	128	22½	1,750
No. 14	147.0	15.6	4. 6	103	22½	1,750
No. 15	100.0	12.6	3. 6	46½	20.	850
No. 16	100.0	12.6	3. 6	46½	20.	850
No. 17	101.6	12.6	4. 3	65	20.	850
No. 18	101.6	12.6	4. 3	65	20.	850

IRON AND WOODEN STEAM VESSELS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
IRON—						
Alarm	158.6	28.0	10.6	800	10.	600
Alert	175.0	32.0	12.9	1,020	10.	365
Monocacy	255.0	35.0	9.0	1,370	11.2	850
Michigan	163.3	27.1½	9.0	685	10.5	305
Pinta	137.0	26.0	10.0	550	8.5	190
Ranger	175.0	32.0	12.9	1,020	10.	365
WOODEN—						
Adams	185.0	35.0	14.3	1,375	9.8	550
Alliance	185.0	35.0	14.3	1,375	9.98	668
Enterprise	185.0	35.0	14.3	1,375	11.4	790
Essex	185.0	35.0	14.3	1,375	10.4	505
Hartford	225.0	44.0	18.2	2,790	12.	2,000
Lancaster	235.8	46.0	19.2	3,250	9.6	733
Marion	216.0	37.0	16.6	1,900	11.25	753
Mohican	216.0	37.0	16.6	1,900	10.65	613
Thetis	166.0	30.3	18.0	1,250	7.55	490
Yantic	180.0	30.0	12.2	900	8.30	225

STEEL, IRON AND WOODEN STEAM TUGS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Fortune	137.0	26. 0	9.6	450	10.	340
Guana	92.6	20.11⅜	8.0	192.4	11.5	300
Leyden	137.0	26. 0	9.6	450	10.	340
Narkeeta	92.6	20.11⅜	8.0	192.4	11.5	300
Nina	137.0	26. 0	8.6	357	11.12	388
Rocket	85.8	18.10	7.0	187	8.5	147
Standish	137.0	26. 0	9.6	450	10.	340
Traffic	106.0	29. 4	9.0	280	10.	
Triton	96.9	20. 9	9.0	212	13.	300
Unadilla	110.0	25. 0	10.0	345	12.	500
Wahneta	92.6	20.11⅜	8.0	192.4	11.5	300
Tugboat No. 5	96.9	21. 0	8.9	225	12.0	450

WOODEN SAILING VESSELS.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Constellation	176.0	42.0	20.0	1,186		
Jamestown	163.6	36.0	16.0	1,150		
Monongahela	223.0	38.0	16.6	2,100		
Portsmouth	153.0	38.3	16.6	1,125		
Saratoga	147.6	36.1	16.0	1,025		
St. Mary's	150.0	37.6	15.6	1,025		

WOODEN STEAM VESSELS UNFIT FOR SEA SERVICE.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Franklin	365.9	54. 3	24.3	5,170	9.	1,050
Iroquois	198.10	33.10	15.3	1,575	10.7	1,202
Minnesota	264.8½	51. 4	23.0	4,700	9.25	1,000
Nipsic	185.0	35. 0	14.3	1,375	10.7	839
Omaha	250.6	38. 0	16.6	2,400	11.3	953
Pensacola	230.8	44. 6	18.7	3,000	9.	680
Richmond	225.0	42. 6	17.4½	2,700	9.5	692
Swatara	216.0	37. 0	16.6	1,900	10.1	680
Wabash	262.7	51. 4	23.0	4,650	9.15	950

WOODEN SAIL VESSELS UNFIT FOR SEA SERVICE.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
Constitution	175.0	45. 0	20.0	2,200		
Dale	117.7	33.10	14.9	675		
Independence	189.0	51. 6	21.6	3,270		
New Hampshire	196.3	53. 0	25.6	4,150		
St. Louis	126.6	32. 8	15.6	830		
Vermont	196.3	53. 0	25.6	4,150		

TORPEDO BOATS UNDER CONSTRUCTION.

Name.	Length	Beam.	Draft.	Displacement.	Speed.	I. H. P.
	ft. in.	ft. in.	ft. in.	Tons.	Knots.	
No. 19	231.4	22.0	7.3	340	30.	
No. 20	197.0	20.5	8.6	360	30.	
No. 21	206.9	19.0	8.0	265	30.	

SUBSTANTIATE OR RETRACT.

Treasury Department,
Steamboat-Inspection Service,
Office of the Supervising Inspector General,
Washington, D. C., August 16, 1897.

Editor Marine Record, Cleveland, Ohio.

Referring to the communication in your paper of the 12th instant, signed "Justice," I desire to reply thereto, to the writer's comments on the officers of a Revenue Cutter boarding and looking out for the outfit of a steamer, by informing the writer that it is a duty of Revenue Cutter's officers to perform just such duty as referred to, and they can impose penalties only when the steamers fail to have on board the equipments named in the steamboat inspectors' certificate issued by those officers. To assume that inspectors can follow all the steamers they inspect to see that the equipments are on board that were put on board when they inspected the steamer is simply preposterous.

To "Justice's" statement that "It is a well-known fact that the inspectors do not enforce but overlook the requirements of the statutes in many cases when the safety of the traveling public is concerned," I desire to say, that if he will refer to the name of a vessel so failing to be equipped at the time of inspection, and will verify the same, I will guarantee to have the officer removed who inspected such vessel. If "Justice" cannot refer to a specific case of neglect, such as he indefinitely charges, he should withdraw the charge as publicly as he has made it.

Very respectfully,

JAS. A. DUMONT,
Supervising Inspector-General.

During the meeting of the Naval Architects in London during the early part of July, the visiting delegates were taken on a visit to the London docks, during which, as the "Engineer" tells us, "One of the United States members of the Congress enlivened the trip by a series of naval architectural stories, which did credit to the yarn producing faculty of his countrymen. He asserted, with the utmost gravity, that a vessel recently built at Maine, in the States, was constructed of such geen timber that she began to sprout all over directly she entered the tropics, her oak trenails representing shrubs along the sides, which impeded the movement of the vessel; and that when a United States cruiser was sent out to her assistance, the captain was found running up and down the deck with a lawn mower to keep the grass down. This was a sample of his stories.

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CLEVELAND, O., AUGUST 19, 1897.

Major James B. Quinn, Corps of Engineers, U. S. A., advertises for proposals in this issue of the Record for building a dredgeboat and dump scow for work on the improvement of Sabine Pass, Texas.

A dispatch from the United States Minister at The Hague states that the Government of the Netherlands has adopted the international regulations for preventing collisions at sea, for the inland waters of that country.

At last it has become possible to obtain the decision of a court of inquiry held to determine who was at fault in the case of a recent collision on Lake Huron. In the current issue of the Record will be found a synopsis of the case and decision arrived at by the court.

The tonnage owned in the United Kingdom is about 11,000,000 tons, and the total entrances and clearances for 1896 aggregated 190,688,509 tons. There entered and cleared in the foreign trade in 1896 at London 15,582,195 tons and the number of vessels registered at that port were 2,740 of 1,661,084 tons. Liverpool has 2,200 vessels of 2,072,194 tons. The Atlantic liners, no doubt, accounts for the increased tonnage of Liverpool over that of London, as it may be noticed that there are a fewer number of vessels registered at the former port than at the latter.

The adjustable propeller, or rather the mechanism which permits the blades of a propeller to be adjusted to any direct pitch while the vessel is under way, seems to be meeting with its due share of favor. The inventor, Sir C. Purcell Taylor, London, informs the Record that since 1891 nearly two hundred steamers have been fitted with his mechanism, most of them being of large tonnage and high speed. He further states that the problem of designing a propeller which should give absolutely the best results has occupied the attention of leading marine engineers ever since the propeller came into use sixty years ago. He continues: "It was reserved for me to accomplish this result. The possibility of correctly circula ting a propeller once for all had occupied my attention from a very early age, and when I went to sea as engineer I had the opportunity of testing my theories. Having an infinitely higher knowledge of mathematics than is possessed by engineers, I was enabled to investigate the matter with certainty to a degree until then deemed impossible; with the result that I discovered the true principle on which the design of the propeller depends, and invented the formulae for determining precisely the form and dimensions of the propeller.

PASSING SIGNALS IN FOG.

The hasty action taken in passing the steering and sailing rules for the lakes two years ago has resulted in considerable of a mix-up relative to the use of passing signals in fog when vessels are not in sight of each other.

An expression of opinion has been elicited from the Supervising Inspector of the Steamboat Inspection Service, who is the head and fount of the pilot rules and regulations, in which he states that he is "decidedly averse to using passing signals when steamers are not clearly in sight of each other, but, that such an opinion does not change the lake law on the subject, which clearly authorizes their use." Mr. Dumont then shunts off to the committee of lake shipmasters, who had the law enacted, over his head as it were.

It is quite evident, that although it is and always has been a practice on the lakes to give passing signals in fog. Yet, it was hardly the intent of the new rules to permit of such signals being given unless the vessels were in sight of each other and the error in framing the rules was no doubt due, as we have said, to the hasty manner in which the rules were passed.

Articles 23 and 26 quoted in the letter of the Supervising Inspector General was no doubt meant to apply only when vessels were in sight of each other and the qualifying article is number 15, which states as follows: "Every vessel shall, in thick weather, by reason of fog, mist, falling snow, heavy rainstorms, or other causes, go at moderate speed. A steam vessel hearing, apparently not more than four points from right ahead, the fog signal of another vessel, shall at once reduce her speed to bare steerageway, and navigate with caution until the vessels shall have passed each other."

The requirements of this section in a measure reduce the dangers liable to arise from the use of passing signals in thick weather, when vessels are not in sight of each other.

The question now arises, whether article 15, which deals exclusively with and mentions particularly thick weather, does not modify or take precedence over articles 23 and 26, both of which articles evidently bear upon the assumption that the vessels are in sight of each other, as article 26, which is linked on to 23, calls for steamers to stop and reverse if necessary when within half a mile of each other. This is a direct acknowledgement that the objects are in sight so that space can be measured. From the present understanding of the rules, steamers proceed on their course, and pass any other steamer or steamers not in sight, by simply sounding a passing signal,

That such a custom is not in accord with the best views of the world's maritime talent is evidenced from the fact that the Inland Rules for bays, sounds, harbors, etc., Rule IX, expressly prohibits the use of passing signals and the International Rules, Article 28, also states that vessels must be in sight of one another, furthermore, for a failure to observe Rule 15, which is essentially the "thick weather" rule, an officer has just had his license suspended for the period of ninety days.

The effect of the recent discussion, supported by the views of Supervising Inspector General Dumont, will no doubt result in calling a more positive attention to Rule 15, which is after all the only "thick weather" rule in the code, and makes it compulsory for steamers to reduce their speed to bare steerageway when hearing a fog signal sounding from any direction within an arc of eight points, or ninety degrees round ahead, that is to say, from anywhere between four points on either bow. This rule being strictly followed when vessels are not in sight of each other will reduce collision risks to a minimum, nor can it be too clearly set forth that something more is required in thick weather, when vessels are not visible, than simply to blow a passing signal, while maintaining course and speed. The full sense, and intent of Rule 15 must be attended to if trouble is to be avoided and this too, notwithstanding passing signals.

The owner of a gasoline motor fishing boat, writing to the Treasury Department, asks whether the recent law (act of Congress approved January 18, 1897) will require the vessel to be inspected, and carry a licensed engineer and a licensed pilot, in view of the fact that she is only "to be used in hauling lobster traps," and for fishing purposes. In reply he was informed that the law requires all vessels of above fifteen tons burden carrying freight or passengers, for hire, propelled by gasoline, naphtha, electric or other motive power, engaged in business bringing profit to the owner, to be duly inspected, etc. We have touched upon the foregoing simply to call the attention of the Secretary of the Treasury or his advisers towards the nuisance of the word freight in connection with marine phraseology. If freight is freight, what is cargo? A railroad train does not carry cargo, but, surely a ship or vessel can earn freight; at least sometimes. In any case, even lake carriers, or bottoms, occasionally, receive an apology for same. From the constant misuse of the words in official documents, reports, circulars, etc., it is becoming a question whether a vessel does not carry freight to earn her cargo or vice versa. Now in the case of dead freight she earns freight, but does not carry cargo, and in that sense the owner might be making a profit, while the Department of the Treasury would be exercising a saneness in using the word as it always does use it. There is also the abbreviation C. I. F.—cost, insurance, freight. We can also make S. F. C.—ship, freight, cargo. It would, however, be perhaps clearer to say that a vessel carried or was carrying 5,000 tons cargo of coal, freight $1 per ton, than to say she was carrying a freight of 5,000 tons at $1 per cargo. We admit that this is not an important matter to the vesselowner or seaman. The former wants the spondoolicks by whatever name it may be called and the latter don't care. "More days, more dollars." Still, we look for correct language, whether concise or otherwise, anything but unwise, from an important branch of the Government. As we started out on a gasoline fishboat, we go back a step to remark that the owner was compelled to hire a licensed pilot and engineer to haul his lobster traps.

The Toledo Naval Academy is all that its name implies, at least, judging from the curriculum as set forth in its literature. The original promotor of the project was Prof. J. G. Halaplain, A. M., who reached Toledo in September, 1896, and started a private school of classics, demonstrating that languages and sciences could be acquired in one-half of the time, if taught properly; soon he interested a few persons of progress in the establishment of the Naval Academy, for which purpose he had established himself in Toledo. The object of the founders is to establish a permanent Naval Academy of the highest grade for boys and young men, which will afford them an opportunity to acquire that general knowledge which makes a truly cultivated man, equally qualified to continue his career on naval lines or to enter the arena of scientific or commercial pursuits. The opening of such an academy places Toledo ahead of all other lake ports.

As Congress would not authorize any more than $300 per ton for armor plate and the manufacturers will not supply it at that figure there has been considerable attention given towards the erection of a plant by the Government to manufacture all armor plate required for the Navy. Here comes the rub, from Duluth-Superior to Buffalo, every possible string is being pulled to show the Navy Department the most advantageous site for the armor plate plant. Mr. Richard Hammond can furnish Erie Engineering Works, shows that Buffalo can furnish an ideal site and his arguments in favor of that port are to say the least, weighty. In the meantime several other ports are just as eager after the establishment of so important an industry and a showing is made of all sorts of advantages.

The southern ports are fast making inroads on the exportation of grain and this feature is not for the best interests of lake carriers. It would appear from the foregoing that the sooner improved facilities to reach the Hudson was brought about the better it would be for the lake trade.

The bids for the construction of a new life saving station at Port Huron, opened this week, varied from $3,834 to $7,762. Eight of the bidders reside at Port Huron, but the ninth and the highest was sent to Washington from Detroit.

Mrs. Sarah Bromwell, the Chicago medium, reached St. Joseph on Tuesday and chartered a yacht. With this she will commence a search for the lost steamer Chicora, with the assistance of a diver. She feels certain of success. Graham & Morton, the former owners of the steamer, have offered a reward of $10,000 if she is located.

INSPECTORS DECISION IN A COLLISION CASE.

INQUIRY INTO THE CAUSE OF COLLISION BETWEEN THE STEAMERS SUSQUEHANNA AND IRA H. OWEN ON LAKE HURON BY LOCAL INSPECTORS FRANK H. DANGER AND FRANK VAN LIEW, HELD AT PORT HURON.

After a careful review of all the testimony in the case, we find that the collision occurred off False Presque Isle, at about 4:30 a. m., July 20th, 1897, both steamers using Central Standard time. The steamer "Susquehanna" was bound up, in light trim with about 600 tons of freight, drawing about five and one-half feet forward, and fourteen feet aft, and the "Ira H. Owen" bound down with a full load, and drawing about fourteen feet of water. The "Susquehanna" entered the fog about 1:30 a. m., and was navigating cautiously, the captain on the pilot house, in charge of the deck, the mate in the lead stand, with a watchman helping him,and two lookouts in the bow, she had been checked down and speeded ahead as the fog thickened or lightened up again, and for about fifteen minutes previous to the collision was running under a slow check. At about 4:25 a. m. a fog signal from an approaching steamer was heard, apparently about one mile off and dead ahead, a passing signal of one long blast was given by the "Susquehanna," and her helm put to port. This signal was answered by one whistle from the approaching steamer, the whistle sounding much closer, and still dead ahead. The engines of the "Susquehanna" were then stopped and reversed and an alarm signal was given; she had but little or any headway at the time of the collision.

On the side of the steamer "Ira H. Owen," we find that the steamer was in charge of the mate, with a wheelsman and watchman at their respective stations, the captain coming on deck just previous to the collision, but not in time to take charge. From the time the mate came on watch at midnight up to the time Presque Isle was passed, at about 3:35 a. m., the weather was clear and fine. Just after passing Presque Isle the weather became a little foggy, and at about 4:10 a. m. the fog shut down very thick, and the fog signal of the "Owen" was sounded at regular intervals, the steamer was checked to half speed at 4:15 a. m., and shortly after a steamer was heard blowing fog signals about two points off the starboard bow. The fog signals from the approaching steamer were heard two or three times and then a signal of one long blast was heard and was taken as a passing signal, and was answered by one long blast from the "Owen," her helm was put to port, and almost immediately an alarm signal was given by the approaching steamer, and about the same time the engine of the "Owen" was checked the second time, and almost immediately afterwards stopped, the alarm signal of the approaching steamer being then answered and the engine of the "Owen' reversed. At this time the steamers loomed up, out of the fog, about two or three hundred feet apart, and came together nearly head on, the "Owen" striking the "Susquehanna" on the starboard bow about two feet aft of the stem. At the time of the collision the "Susquehanna" was in charge of the captain, Michael Riley, and the "Ira H. Owen" in charge of the mate, Sidney O. Marsh.

We find the fact to be that just immediately prior to the collision, the bow of the "Owen' was in clear sight of such members of the "Susquehanna's" crew as were forward, and we think their evidence warrants the conclusion that the speed of the "Owen" was considerable at this time, all of them stating that she was "carrying a bone" and breaking the water in front of her.

We therefore find the "Owen" at fault in not navigating with more caution, and in not blowing an alarm signal immediately upon hearing the port signal blown by the approaching steamer, for the reason that it appeared to the officer of the "Owen" that the port signal was blown by an approaching steamer, two points off her starboard bow and only a short distance ahead. We also find the "Owen" at fault for not immediately stopping and reversing their engine at the time the port passing signals were given, as it must have been apparent that there was danger in keeping up their headway under the circumstances and attempting to cross the track of the approaching steamer.

We therefore hereby suspend the license of Sidney O. Marsh, for ninety days, to take effect from the date hereof, for violation of Rules 15 and 26 of "An act to regulate navigation on the Great Lakes and their connecting and tributary waters." Approved February 8th, 1897.

FRANK H. DANGER,
FRANK VAN LIEW,
Local Inspectors.

Port Huron, Mich., August 17th, 1897.

LAKE FREIGHTS.

Grain is king these days, as it is the backbone of lake freights at improving rates. Early in the week 1¼ cents was the figure; now it is 1⅜ cents and 1½ cents on wheat, Chicago to Lake Erie, with fairly brisk chartering and grain reaching Chicago elevators at a lively rate, so that considerable tonnage has been called off the iron ore trade. This week shows the first full cargo of corn from Duluth which has been shipped for several years past; 100,000 bushels of it paid 1⅜ cents to Buffalo, though there is very little movement in grain from Duluth or Ft. William as yet, but when it does come in more freely, ore and coal rates will likely take a steady rise.

The ore market, with Chicago grain charters equal to 56 cents on ore, is not a bit too tempting, but the old rate of 50 cents from Ashland and the head of the lakes still continues with plenty of tonnage offering. On the other hand, the 40 cent Escanaba rate is not looked at and an advance is almost certain within the next few days. From Marquette to Tonawanda 60 cents was paid; for the balance of the season at 50 cents from Escanaba It is estimated that over two million tons of ore will be moved after September 1.

Coal freights are nominal and 20 cents all around is the going rate; five cents better to minor, or side ports. The meanest sort of coal is being offered for fuel, at higher prices, all of which is good for the mine-owner, as he can clear off the inferior coal during the strike times; besides, the poor fuel can be sold to-day where it would not be used when the better mines are working. With the settlement of the strike, coal will have to go forward very briskly and while some charters at slightly improvel rates have already been made, say 30 cents, Lake Michigan, yet the general feeling is to hold off and take going rates later in the season, and there is some talk of demanding 50 cents to leading ports when shipments begin again.

DECREASED IMPORTS.

The regular monthly statement of dutiable goods in bonded warehouses at the port of New York on July 31, shows a decrease during the month of $4,345,552. The value of such stocks remaining in bond at the end of the month was $7,518,275. The decrease during July was due to the enactment of a higher tariff and compares with a decrease during June of $5,479,866 and an increase during May of $5,802,217. Wrapper tobacco shows a loss of $2,800,00. The decrease is silks and woolens was also marked.

OVER-SEA CARRYING TRADE.

According to the records of the Treasury Department British vessels are carrying over 55 per cent of the merchandise of the United States, both imports and exports. Examination of figures for the first six months of this year show that the total imports of vessels have been of the value of $432,689,981 and of domestic exports in vessels $452,800.00.

The percentage of imports carried in American vessels is 15.35 and in foreign vessels 84.65; of imports in vessels the British have carried 55.89 per cent; British vessels carry 68.23 per cent of the value of exports by vessels; German 8.92; French 2.19; Norwegian 2.93; and all other foreign 9.54.

The value of imports carried in American vessels for the six months ending June 30 was $6,428,149, and of that carried in foreign vessels $366,261,832, and the value of exports for the same period carried in American vessels was $37,113,168 and that of foreign vessels, $415,687,237.

During the first half of the present year the value of imports in cars and other land vehicles was $20,068,149, and of exports, $27,297,618.

FORCE TO BE INCREASED.

It is reported, says the Sault Ste. Marie News, that the War Department is seriously considering the advisability of appointing three assistant superintendents and necessary lockmen to operate the Weitzel lock continuously and independently of the Poe lock. This action, if taken, will result in materially bettering the service at the locks, and in the opinion of vessel men and others will greatly lessen the danger of accidents, which are liable to happen at the present time when the two locks are operated simultaneously by a force which is no larger than necessary in the working of the big lock.

A SMALL STEAMER FOR THE YUKON.

A small steamboat complete in every detail will be built in Chicago, then taken apart, shipped in sections to the mouth of the Yukon, put together there and ply between St. Michaels and Dawson City.

William Chace & Co will build the steamer. Plans were completed this week by the Marine Iron Works.

The craft will be a stern-wheeler, 75 feet long, 17 feet beam, and will draw, with a load of forty tons, 18 inches. Her engines will be 7x28 inches, and she will carry 150 pounds of steam. She will be flat bottomed and have two wing rudders and a balance rudder. Both the main and the upper deck will be fitted with staterooms and she can furnish forty passengers with sleeping accommodations. Her timbers will be oak and the planking Georgia pine. Plans show her lines to be symmetrical, though nothing has been sacrificed to motive power and structural strength. She will tow two barges. The cost is to approximate $12,000.

VIOLATIONS OF LAW.

List of vessels reported for violation of St. Mary's River Rules since July 14th:

Edward Smith, July 16, Rule I; Adella Shores, July 17, do.; Griffin, July 18, Rule III; Northern Queen, July 19, Rule I; Harvey Brown, July 22, do.; S. S. Curry, July 22, Rules, I and II; Peshtigo, July 29, Rule I; Devereux, July 30, do; Frontenac, July 31, do.; Harvey Brown, July 31, do.; Roanoke, Aug 2., Rules I and II.

Warned: Lansing, E. H. Jenks, Lewiston, Aurora, Ericsson, Edward Smith, Eugene Hart.

Reported for violation Sec. 4178 Revised Statutes (no name on bows): Saugatuck, J. M. Nicol.

ST. MARY'S RIVER WORK.

On August 31, Col. Lydecker, Corps of Engineer, U. S. A., will open bids for dredging Round Island Shoal Nos. 1 and 2, for widening the 300-foot channel to 800 feet, to a depth of 23 feet in each case; for dredging the shoals at the St. Mary's river upper approach to make a straight channel 1,000 feet wide, 21 feet deep; and for some widening and deepening work at Middle Neebish. The available appropriation is $150,000.

A LARGE DREDGE.

The new dredge which is being built for breakwater work at Buffalo is nearly finished, and will probably be launched this week. There is nothing to compare with this dredge on the lakes as it is one of the largest craft of the kind in existence.

The dipper is of the clamshell pattern and weighs fifteen tons. It opens at the bottom and sinks by its own weight in the soft mud, which it will remove preparatory to the building of the proposed new breakwater. The ordinary capacity of the dredge scoops is two or three cubic yards. The giant clamshell lifts ten cubic yards of earth, which material will weigh from 2,800 to 3,500 pounds to each yard. With its load the dipper will weigh thirty tons. The power of the engine and strength of the derrick and hoisting apparatus required for the work has been made very substantial.

Soft mud will have to be removed to the depth of forty feet in some places before the breakwater can be built and the big clamshell will find the rock bottom. No such depth of mud has been encountered in any former work on the lakes. In the construction of the dredge, 250,000 feet of white pine and oak timber was used. Some of the timbers are eighteen to twenty inches square and sixty to seventy feet long. The derrick timbers are 18 inches square. The dredge is 145 feet over all, with 40-foot beam and 12-foot sides. The cost of construction was about $50,000.

ANOTHER REVENUE CUTTER.

Officers of the Revenue Cutter Service, Treasury Department, will soon ask for bids on another revenue cutter. designed especially for service at New York, and for which an appropriation of $175,000 is available. This new cutter will be named the New York and will be about the size of the naval vessel Bancroft, which is attached to the European station. The New York will have a displacement of 708 tons, will be 188 feet long and 30 feet beam, and will be required to make 16 knots on her official trip.

H. C. BURRELL,

Marine Reporter.

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AT ALL HOURS,
NIGHT OR DAY.

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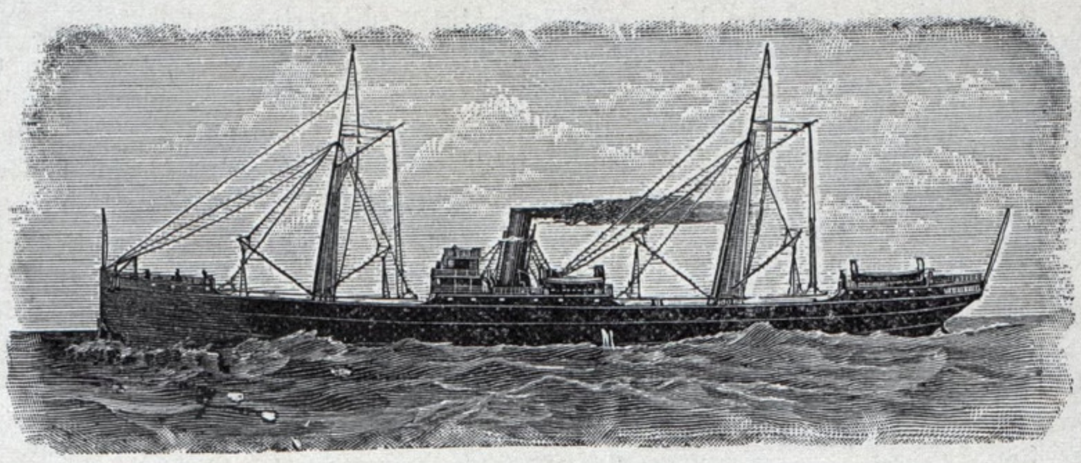

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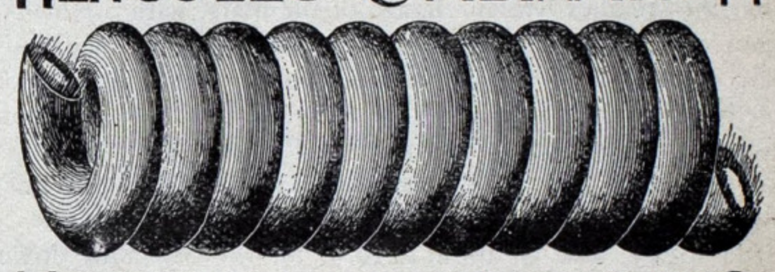

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BATTLESHIP SEAMANSHIP.

Mr. Charles H. Cramp has contributed to the discussions at the Naval War College a paper on battleship seamanship, in which he says:

"I maintain that the command of a fleet of modern battleships, on whose success in a campaign the issue of a cause or the fate of a nation may depend, is by far the greatest and most trying trust that can ever in our time or in the future be confided to one man."

He declares that fighting in a small modern warship is entirely different in its demands upon the commander of a vessel from fighting in a battleship. This is due solely to the difference in the character of the ships nowadays. He makes plain, however, that a commander of a battleship, well skilled in the art of maneuvering and fighting, can fight in almost any kind of smaller vessel, and therefore he urges that, so far as possible, the officers of the Navy shall have opportunity to study—and he says this can only be done by actual work on the deck of a vessel—"battleship seamanship." He is opposed, therefore, to laying up battleships in time of peace for the sake of economy. He says on this point:

"The dullest intellect now realizes that modern fleets cannot be improvised. But some apparently cling to the illusion that modern seamanship can be. This illusion, if followed, must neutralize all the practical benefit of the new Navy this country is building. For any purpose of warlike activity our large ships might almost as well not exist as be laid up."

The difference that exists between the present battleship and what might be called the pioneer of modern battleships is made clear by Mr. Cramp, who emphasizes the difference between the fighting craft of former and present times by calling attention to the fact that at the battle of Trafalgar the Victoria, Temeraire, and Redoubtable of Nelson's fleet were foul of each other for some time, and that none of these ships sustained any serious injury because of this contact. He says that "no one imagines that three modern battleships could be foul of each other for many minutes before some of them would begin to sink from the effects of contact alone, and irrespective of any execution done by their batteries or torpedoes."

The loss of the Victoria in a smooth sea during maneuvers Mr. Cramp cites as showing how important is the knowledge of the simple radius of the helm of a ship. The accommodation of a ship to the wave action, a matter of the most ordinary seamanship, calls, Mr. Cramp also says, for experience that can be gained only at sea and in time of storm. It is only recently that the Indiana of the United States Navy had a most perilous experience off Hatteras. Later the battleship Maine rolled so when off Hatteras that several of her crew were swept overboard. Mr. Cramp cites the experience of the British battleship Resolution in the Bay of Biscay on this point:

"A great battleship, with enormous weights carried high and massive movable parts straining at stay bolts and fastenings with each gyration in the sea way, and all the other vicissitudes of heavy labor under severe storm conditions; all these occurrences operating upon the judgment of a commander not wholly or closely familiar with the capabilities of the ponderous and complex mechanism under his control, might easily shake his faith in the power of the ship to stand it, and thereby impel him, as it did the captain of the Resolution, to seek the nearest shelter regardless of the tactical or strategical schemes or plans which such action might derange.

"Clearly in this case the bad performance of a unit of action was due to the commander's lack of familiarity with the operating conditions of the mechanism in his charge. The misfortunes of the Resolution resulted from excessive rolling. The excessive rolling was caused by failure to accommodate the ship to the wave action in which she labored. The failure to so accommodate the ship must have been due to want of familiarity with the group of principles in naval architecture upon which calculations of stability and righting moment are based, upon the proper and successful application of which the safety of ships depend.

"Had the commander of the Resolution possessed the rudiments of such knowledge he would have observed the periods and direction of the waves, he would have known the point to which his ship must be laid in order to meet the wave attacks to the best advantage, and his vessel would have undergone no worse punishment than that suffered by the other ships of the same type and model, from which came no sign of distress.

"Had the Resolution been a turret ship instead of carrying her heavy guns in open barbettes, her difficulty would have been aggravated by the additional high and movable weights of her turrets. But in no event was she in any danger not instantly and easily surmountable by the simple expedient of laying her course to the point at which the wave action, violent as it was, would be least effective upon the form of her hull.

"I do not by any means argue that the commander of a ship should be a naval architect or constructor. But, having familiarized himself with principles of that art which touch directly and immediately his function of handling his ship under sea conditions of common occurrence, and having gained sufficient knowledge of her traits, he should be able to form an instant and correct judgment as to her point of best behavior in any seaway. It goes without saying that sea experience is the only school in which these problems can be worked out."

Mr. Cramp says that in his long career in ship-building the elimination of the human factor in the management of ships has become almost a passion with him. He has striven in his advance in his profession to accomplish that end. Three years ago he declared in an address in this city that the average ocean liner was "at the mercy largely of the tank trimmer." He said that if a ship had on board a tipsy tank trimmer the safety of her passengers and her cargo would be in as great jeopardy as if her captain were incompetent in time of a great crisis. The human factor in battleships centers largely in the skill and competence of the Admiral in command. The only way to bring the powers of the Captains and Admiral to their fullest efficiency is by the mastery of battleship seamanship. As to that Mr. Cramp closes with this remark:

"After all preparatory courses, academic or post-graduate, the one and only ultimate school of efficiency is the deck itself, and that must be the deck of a ship under way."

EASTERN FREIGHT REPORT.

The weekly freight report for the East coast as furnished the Record by Messrs. Funch, Edye & Co., New York, states that there has been a considerable shrinkage in comparison with the business of the two preceding weeks, and there can be no doubt but that, temporarily at least, the chartering business for grain has met lower figures. So far the enquiry and consequent charters have, with very few exceptions, been limited to August-September loading, and the impression seems to gain ground that the facility of delivery of grain to the sea board for those months is fully reached, if not exceeded. This fact perceptibly effects all unchartered tonnage heading for this coast, and the exceedingly heavy advance in wheat, with maize to a certain extent in sympathy, in our markets during the last few days, appears to check the enquiry for later months, when at least some shipments from the Black Sea may be looked for in opposition to our inflated prices. Rates to Cork f. o. b. at time of writing are quotable at from 3s @ 3s 1½d.; for large boats to picked ports in the U. K. or on the Continent from 2s 7½d. @ 2s 10½d as to ports. The strength of our grain markets has rested on the frantic demand from France, followed in a limited measure by other Continental ports, but very sparingly by the U. K., hence berth freights to the latter ports are out of line with rates in any other direction. Luckily there is a fair enquiry for boats in other trades, notably deals and timber, likewise cotton from South Atlantic ports (although not before September-October for latter freights), hence we do not look for any decided decline in freights generally, in spite of temporary cessation of demand for grain tonnage.

Rates in all directions remain firm, in some lines, as for case oil to the East, an advance has already been established, as our quotations and charters reported show, and an advance has already been established, as our quotations and charters reported show, and an advance of the market generally appears inevitable. The only exception is in barrel oil to Europe, for which there is scarcely any demand, and vessels depending on such business have to accept proportionately low rates.

VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

Cities Where Stored.	Wheat. Bushels.	Corn. Bushels.	Oats. Bushels.	Rye. Bushels.	Barley Bushels.
Albany	.....	15,000	40,000	.....	.....
Baltimore	1,672,000	676,000	92,000	37,000	.....
Boston	18,000	793,000	4,000	.....	.....
Buffalo	424,000	444,000	226,000	50,000	165,000
" afloat	.....	.....	.....	.....	.....
Chicago	2,521,000	10,128,000	2,408,000	253,000	10,000
" afloat	.....	.....	.....	.....	.....
Cincinnati	.....	2,000	8,000	.....	2,000
Detroit	158,000	25,000	29,000	37,000	13,000
" afloat	.....	.....	.....	.....	.....
Duluth and Superior	1,053,000	157,000	93,000	357,000	223,000
" afloat	.....	.....	.....	.....	.....
Indianapolis	339,000	41,000	22,000	1,000	.....
Kansas City	1,067,000	299,000	119,000	6,000	.....
Milwaukee	142,000	107,000	43,000	15,000	75,000
" afloat	.....	.....	.....	.....	.....
Minneapolis	5,052,000	27,000	82,000	6,000	8,000
Montreal	239,000	69,000	510,000	22,000	35,000
New York	750,000	1,277,000	1,284,000	334,000	64,000
" afloat	.....	69,000	.....	.....	.....
Oswego	.....	61,000	3,000	.....	21,000
Peoria	.....	14,000	35,000	.....	.....
Philadelphia	164,000	705,000	87,000	.....	.....
St. Louis	504,000	103,000	19,000	14,000	.....
" afloat	113,000	.....	.....	.....	.....
Toledo	540,000	380,000	255,000	175,000	.....
" afloat	.....	.....	.....	.....	.....
Toronto	25,000	.....	13,000	.....	2,000
On Canal	307,000	628,000	47,000	40,000	29,000
On Lakes	1,880,000	2,473,000	1,110,000	189,000	215,000
On Mississippi	158,000	14,000	51,000	.....	.....
Grand Total	17,226,000	18,507,000	6,580,000	1,536,000	862,000
Corresponding Date, 1896	45,876,000	13,750,000	7,279,000	1,596,000	612,000

NOTES.

An old sailor who had fought at the battle of the Nile, in the Temeraire, had by some means got into St Paul's to witness the funeral of Lord Nelson, who, it will be remembered, commanded the Victory, on board which he fell. During the funeral sermon preached on that melancholy day, when the grave closed on the remains of the hero, Jack observed that the clergyman in almost every sentence introduced the word victory. "The victory is alone to be ascribed to Thee!"—"Glory be to Him who gave us the victory!" The honest tar, burning with impatience at hearing this, roared out: "Come, damme, master parson, why don't you say something about the Temeraire—my ship, dy'e see!"

The following good cat story from the Picayune of the 30th is vouched for by Capt. Hawthorn, of the Southern Pacific Steamship El Norte:

About a month ago just as El Norte was leaving the Algiers moorings, loaded with freight for New York, a beautiful cat walked aboard. Not knowing the owner, Capt. Hawthorn took the cat along with him to New York. Madame Puss became the pet of every one on board and had a glorious time. When El Norte arrived in New York, Pussy, with the utmost sangfroid, walked ashore, and, looking around, concluded to circumvigate New York. During the interim El Norte sailed back to New Orleans minus the cat. Everyone on board missed Pussy greatly, as she had become a great favorite. One can imagine the surprise of every one connected with El Norte when, two days after landing at the Algiers dock, another steamship of the Morgan Line arrived from New York, and there, coming down the gangway, was the cat which had set sail on El Norte. Pussy had missed Capt. Hawthorn's ship, and with remarkable feline sagacity, or instinct, had boarded another ship of the same line that would bring her safely back to her old home in New Orleans.

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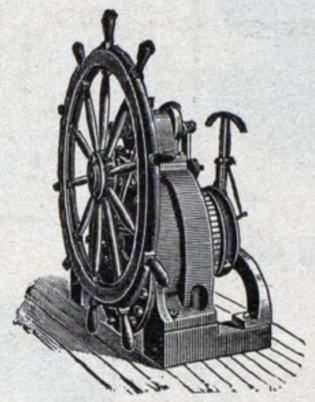

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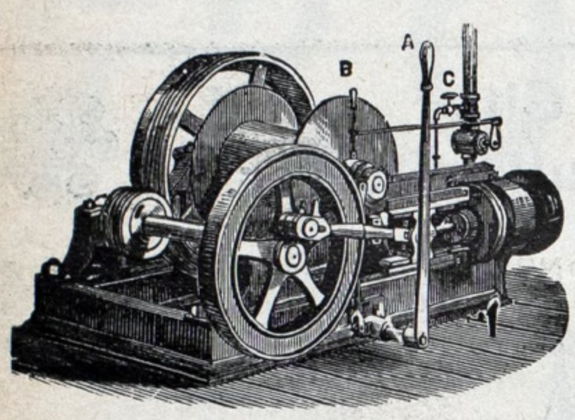

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Steamer Pine Lake, Charlevoix, 16 and 30x24.
Passenger Steamer Pilgrim, St. Clair, 14 and 28x20
Steam Barge Iona, Grand Haven, 24 and 46x42.
Steam Barge M. T. Greene, Chicago, 20 and 36x36
Steamer H. W. Williams, South Haven, 18 and 36x30
Steam Barge Mark B. Covell, Manistee, 18 and 30x26
Steam Barge Isabella J. Boyce, Michigan City, 19 and 32x26.
Steam Barge Luella H. Worthington, Cedar River, 19 and 36x30.
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Steamer Lorain L, South Haven, 12 and 21x16.
Passenger Steamer Lotus, Escanaba, 16 and 30x24
Steam Barge Sachem, Grand Haven, 21 and 38x36
Passenger Steamer Bon Ami, Saugatuck, 14 and 28x20.
Steam Barge Charles A. Street, Chicago, 20 and 36x36.
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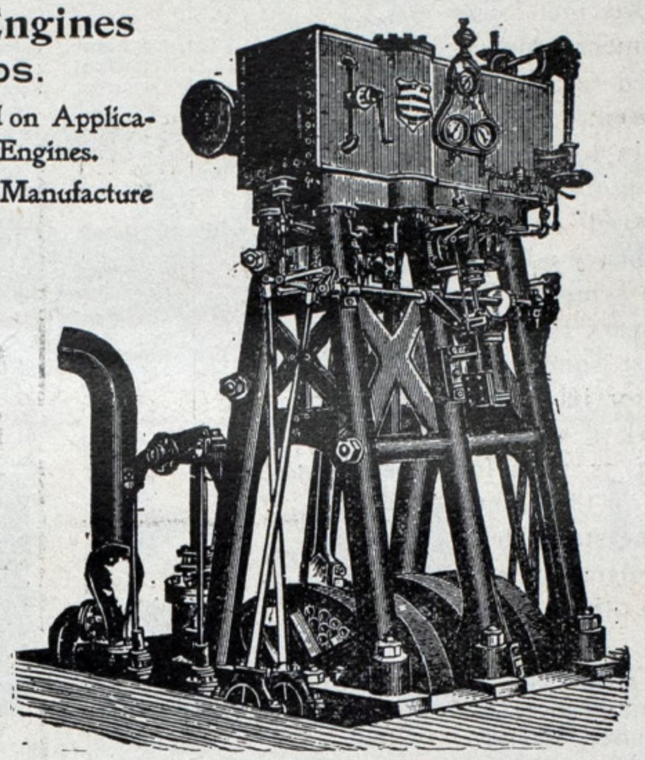
Passenger Steamer E. G. Maxwell, Pentwater, 14 and 28x20.
Passenger and Freight Steamer Bon Voyage, Saugatuck, 16 and 30x26.
Passenger and Freight Steamer Mabel Bradshaw, Muskegon, 26 and 28x26.



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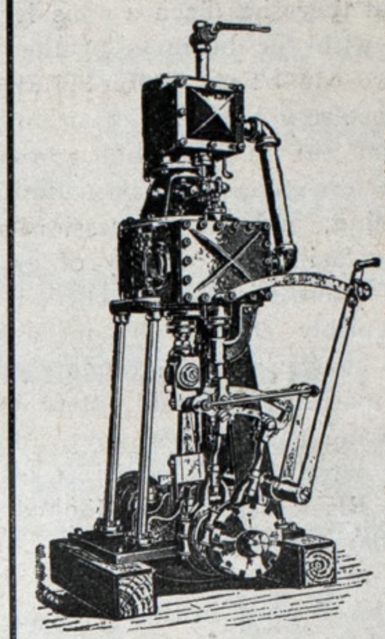

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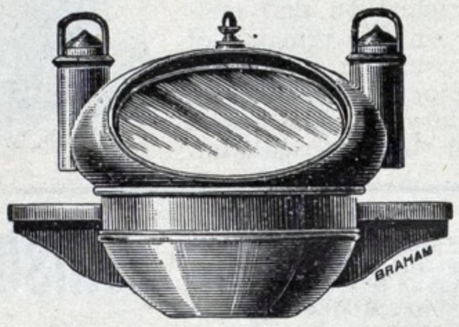

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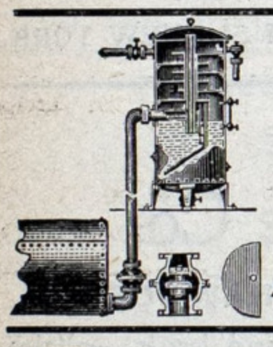

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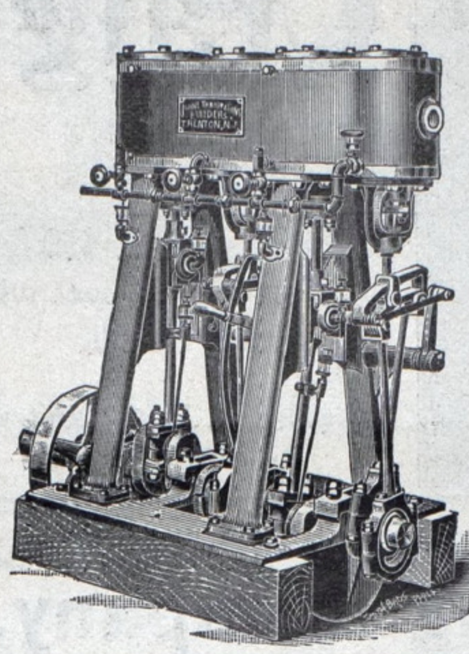

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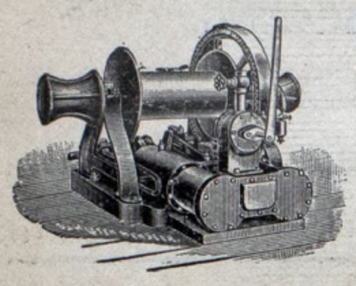

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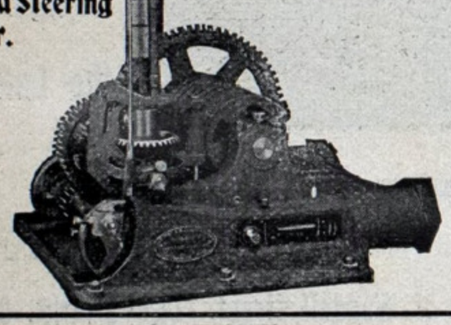

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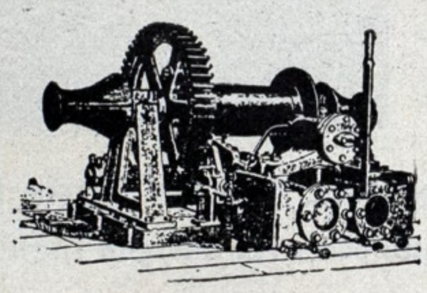

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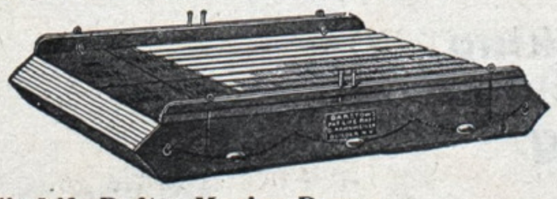

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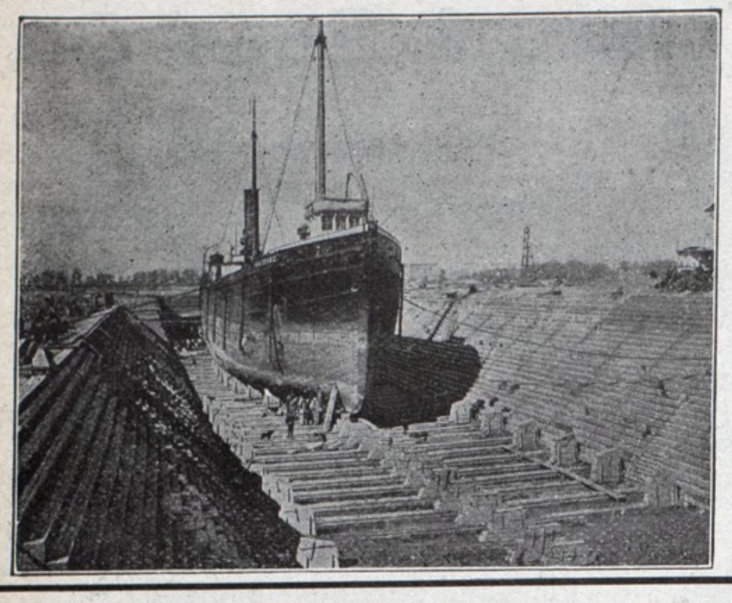

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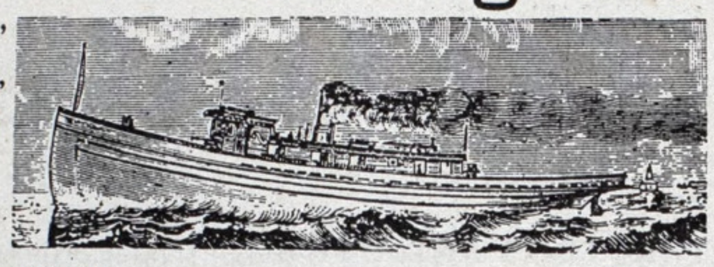

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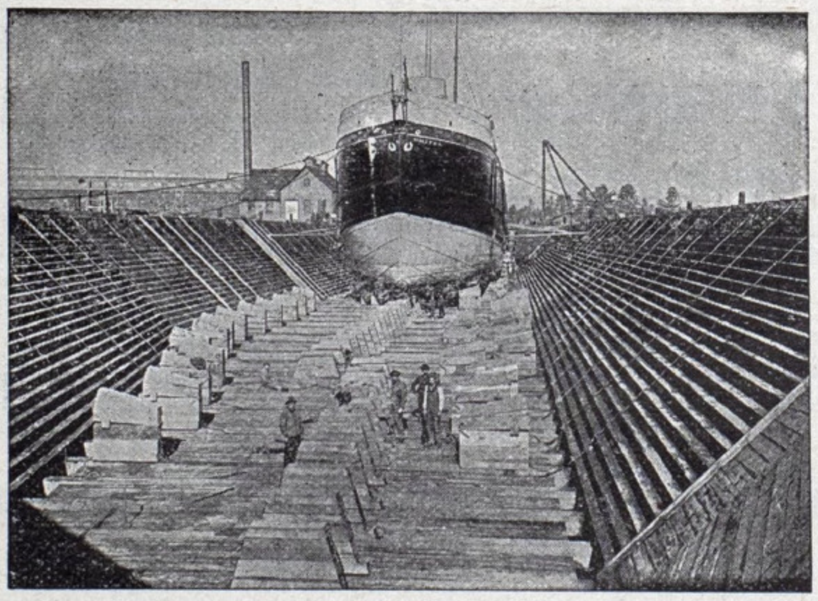

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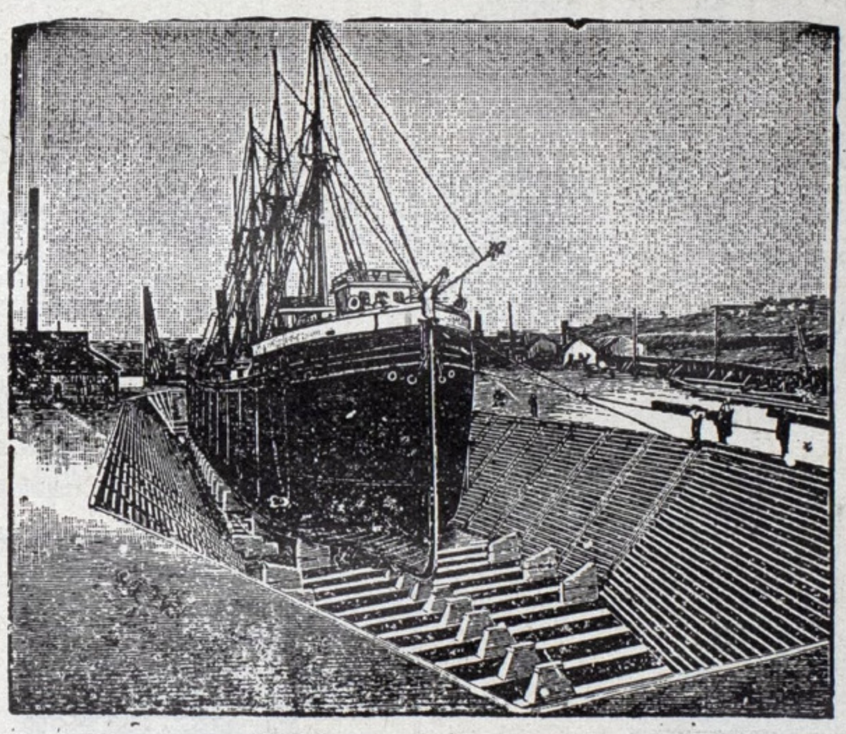

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